

NATION'S SCHOOLS

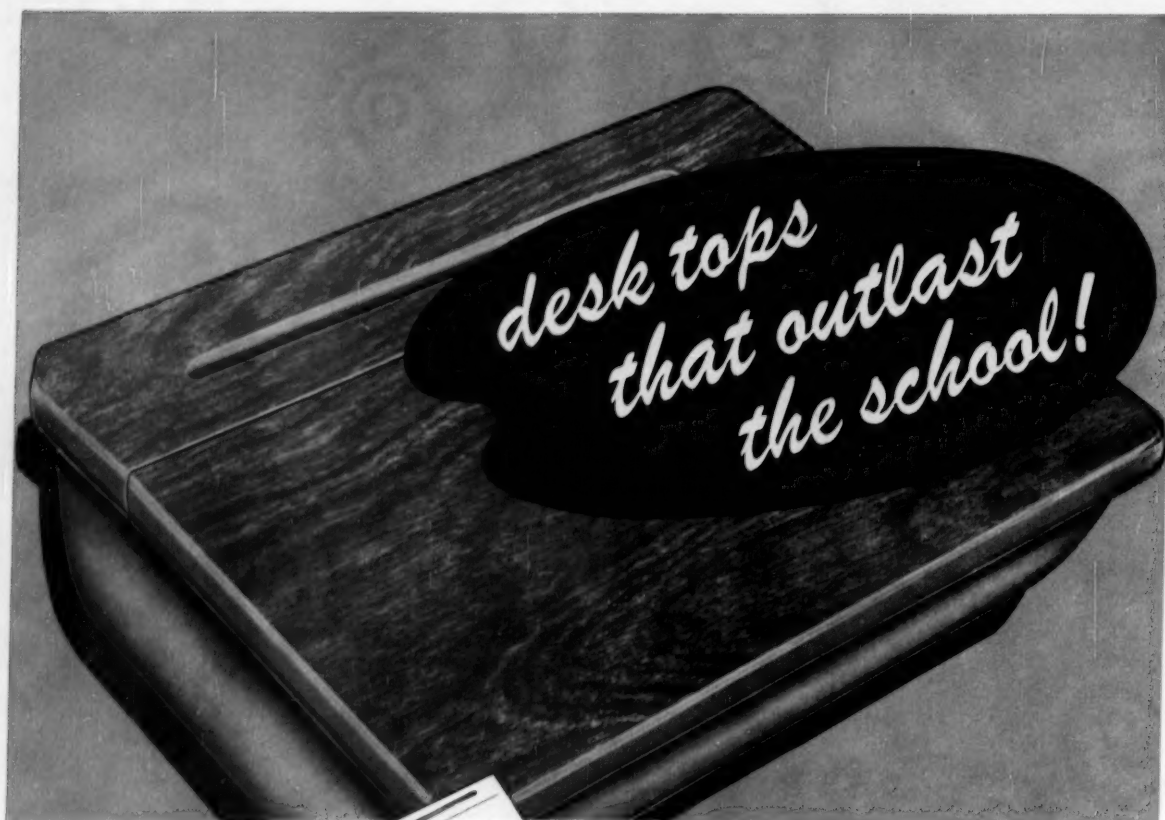
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APRIL

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THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION



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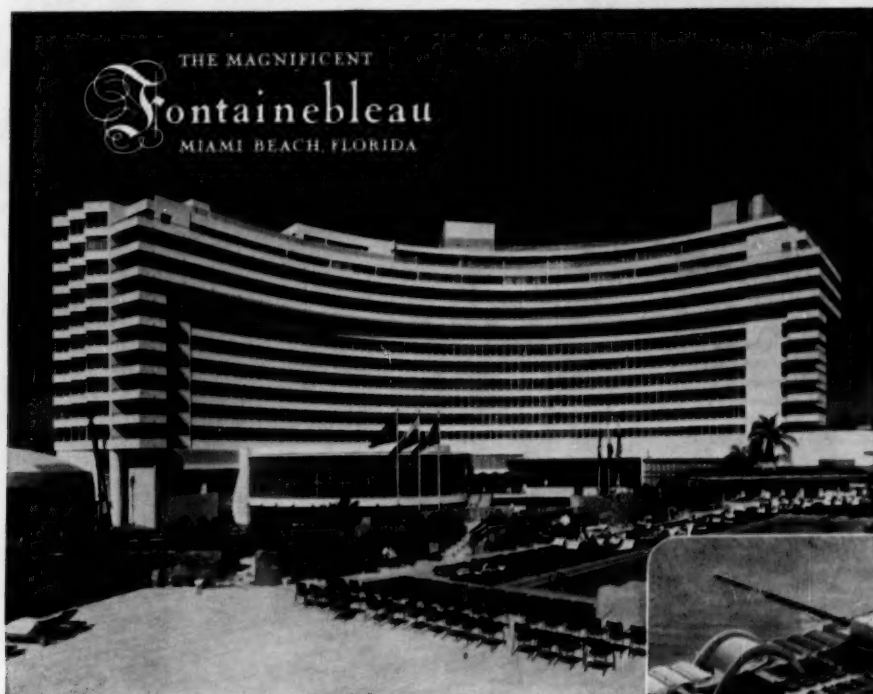
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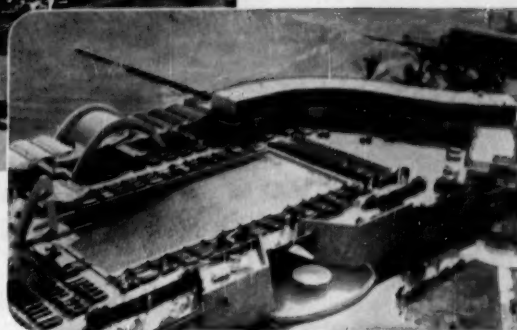
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Advertising Office

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THE NATION'S SCHOOLS

THE MAGAZINE OF BETTER SCHOOL ADMINISTRATION

APRIL 1955

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AMONG THE AUTHORS



Kenneth E. McIntyre

A rundown on some promising practices of county and rural area superintendents is given (p. 43) by KENNETH E. MCINTYRE, associate professor of educational administration at the University of Texas. Dr. McIntyre went to Texas from his native state of Nebraska (where he spent five years as a teacher and superintendent), stopping on the way to serve three years as professor of education at the University of South Dakota and a year as associate professor of educational administration at the University of Tennessee. He was recently director of research for the Texas County Superintendents' Study and author of the report of the study published by the Southwestern C.P.E.A.



F. A. Van Slyke

F. A. VAN SLYKE tells, on page 51, of his experience with Indiana's state school building authority. Mr. Van Slyke has been superintendent of schools in the fast growing community of Griffith, Ind., since 1947. A teacher and administrator for 22 years, he served as principal of the junior high school at Elmwood, Ind., and as high school principal at Cambridge City, Ind., prior to going to Griffith.

Being the early rising type, E. R. HARRINGTON (p. 62) conducts a 5:30 a.m. class three mornings a week for high school students who want to do college level work in physics and chemistry. (The other two early mornings of the school week are devoted to his own scientific work.) Dr. Harrington, for 24 years head of the science department of the Albuquerque High School, last year was named director of secondary education for the public schools of Albuquerque, N.M.

One of the teachers who plans "Orientation Day—With Flowers" (p. 56) at the Mary Lynn School, Tucson, Ariz., is ARLENE ROBERTS LAND. Mrs. Land has been a first grade teacher at the school since 1953; formerly she taught at Racine, Mo.; Des Moines, Iowa, and Tulsa, Okla. The mother

of two children, Sara Katherine, 9, and Jim, 7, Mrs. Land is interested in the creative arts—anything she can do with her hands, including water color and textile painting, sewing, making angel food cakes, and writing.



Mrs. Land and children



Harley J. Powell

The superintendent of schools at Wauwatosa, Wis., describes on page 74 the town's newest school building. HARLEY J. POWELL has been administrator at Wauwatosa since 1949; before that he was teacher and principal at Brooklyn and superintendent at Mount Horeb, Clintonville and Watertown, all in Wisconsin. He is a past president of the Wisconsin Association of School Administrators and of the Milwaukee Suburban Conference.

DANIEL A. BRIGGS (p. 94) is teacher of English and reading at Columbia High School, East Greenbush, N.Y. Formerly he taught at Hammond Central School, Hammond, N.Y. Mr. Briggs is interested in scale model railroading, having his own 4 by 8 foot layout. Another hobby is duck hunting on the St. Lawrence River.

ROBERT WILLIAM MACVITTIE ("Assigning and Evaluating the Substitute Teacher," p. 87) is professor of elementary school administration and principal of the campus school at the State University of New York College for Teachers, Buffalo. Formerly he was a teacher at Pine Plains and Middletown, N.Y., and an elementary school principal at North Haven, Conn. Dr. MacVittie is now chairman of the Western New York Principals' Study Group.



R. W. MacVittie

FRANK O. WASHAM has been director of lunchrooms for the Chicago public schools since 1934 (p. 98). Mr. Washam is active in the affairs of many professional organizations. This year he is president of the Illinois School Food Service Association; he is a past president of the National School Cafeteria Association and at one time was a director of the National Restaurant Association. Since 1940 he has been chairman of the entertainment committee of the Chicago Restaurant Association.



Frank O. Washam

Some methods schools can use to win friends in the community are described (p. 82) by JAMES J. JONES, assistant professor of educational administration, Arizona State College, Tempe. Dr. Jones has been in the teaching profession since 1942, both as a civilian and as a soldier. In 1943 and 1944 he was instructor in an army school for illiterates at Macon, Ga.; in 1944 and 1945 he served as an instructor in the administrative schools of the Fifth Army in Rome. After his release from the army he was named superintendent of schools at Tignall, Ga., and, later, assistant professor of educational administration at Mississippi Southern College.

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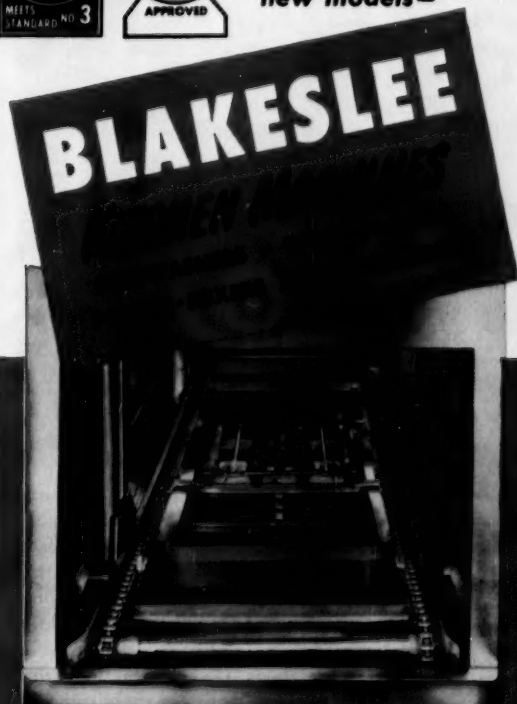
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OPINION POLL

Ethics involved in out-of-school jobs for teachers; pupils should not be customers, superintendents say

A nationwide sampling of superintendents' opinions by The Nation's Schools

BILLS have to be paid and school teachers, like everyone else, have to pay them—on time, if possible. It's this reality of our economic system that helps raise the question: Are certain kinds of out-of-school jobs unethical for teachers in public school systems? It's a question that local school systems and state educational associations are faced with these days as teachers work during nonschool hours to supplement their income.

Some superintendents, in a recent opinion poll conducted by The NATION'S SCHOOLS, say that out-of-school employment of any kind should be frowned upon by the local school board, while other superintendents say that what teachers do outside of the school is not the legitimate concern of board or administrator. But most superintendents take neither of these two positions. Instead, they draw a fine line of distinction between employment which is ethical and that which is not.

Where is the line? Superintendents place on one side jobs in which teachers sell instructional items to their own pupils. This kind of employment they object to. They approve, however, of the teacher's

selling items of other kinds to people in the community who are not parents of pupils he teaches. The majority of superintendents also approve of teachers giving private instruction, such as music lessons or tutoring for pay. They'd rather that the tutoring be done during the summer months but will go along with it generally in any case.

About one out of six superintendents who answered this latest opinion poll said No to all three questions asked. Teachers should be paid enough salary so that they don't have to work outside of their own professional responsibilities, they insisted. As one superintendent pointed out: "Teaching in itself is a full-time occupation. If an individual is going to do his best, he will use all his energies toward that goal."

One highly realistic superintendent with a sensitivity for public opinion said that we had better not lead our communities to believe that teaching can be a part-time profession or lay citizens will soon suggest outside employment in other fields as an answer to the problem of inadequate salaries.

The superintendents who object only to the practice of teachers' sell-

ing items to parents of their own pupils do so, they say, because it can lead to questionable pressures and special favors to pupils. They prefer not to encourage—but neither to prohibit—teachers' working at nights and on week ends as store clerk, truck driver, or bartender. Unfortunate as it may be, they say, if teachers must drive themselves to find other sources of income it would be a mistake to surround the profession with so many "don't's" that we discourage young people from becoming teachers. Virtually everyone would agree with the superintendent who said: "It just plain makes me mad to be asked this question. One job ought to be enough to cover the family budget." Yet, it often is not.

Some superintendents pointed out in their replies to the questionnaire—just as has probably been said ever since the time of Hippocrates—that codes and regulations do not make ethics. Human behavior does. As a superintendent wrote: "It is not the place of a code of ethics to restrict the individual in outside activities which are honest and which do not interfere with his value as a professional person. Professional ethics should govern the action of people only in their professional dealings."

This line of thinking goes on to point out that teachers can sell, recommend, tutor or draw consultants' fees, either with or without a high sense of ethics. It depends entirely on the teacher. A teacher's standing in the community could easily be such that his motive would never be questioned no matter what he had to sell, and, therefore, both pupils and patrons could have expert counsel in buying educational supplies. Teachers should not be discriminated against as a group, some held, there being nothing wrong with a teacher's selling to parents of his pupils as long as the transaction in no way affects the child's status and everyone accepts the fact.

One superintendent points out that there may actually be instructional values gained from teachers' conducting extra enterprises of the kind we're talking about. He says: "I think that our teachers who use their summers selling teaching aids and materials to parents are doing a great service to our schools in educating the parents to the needs of the pupils. Also, this gives the home an opportunity to aid our schools in furnishing the pupils with the materials they need at home."

Do you consider it ethical for teachers to sell instructional items to their own pupils? (musical instruments, books, encyclopedias, sports equipment, etc.) Yes.....14% No.....86%

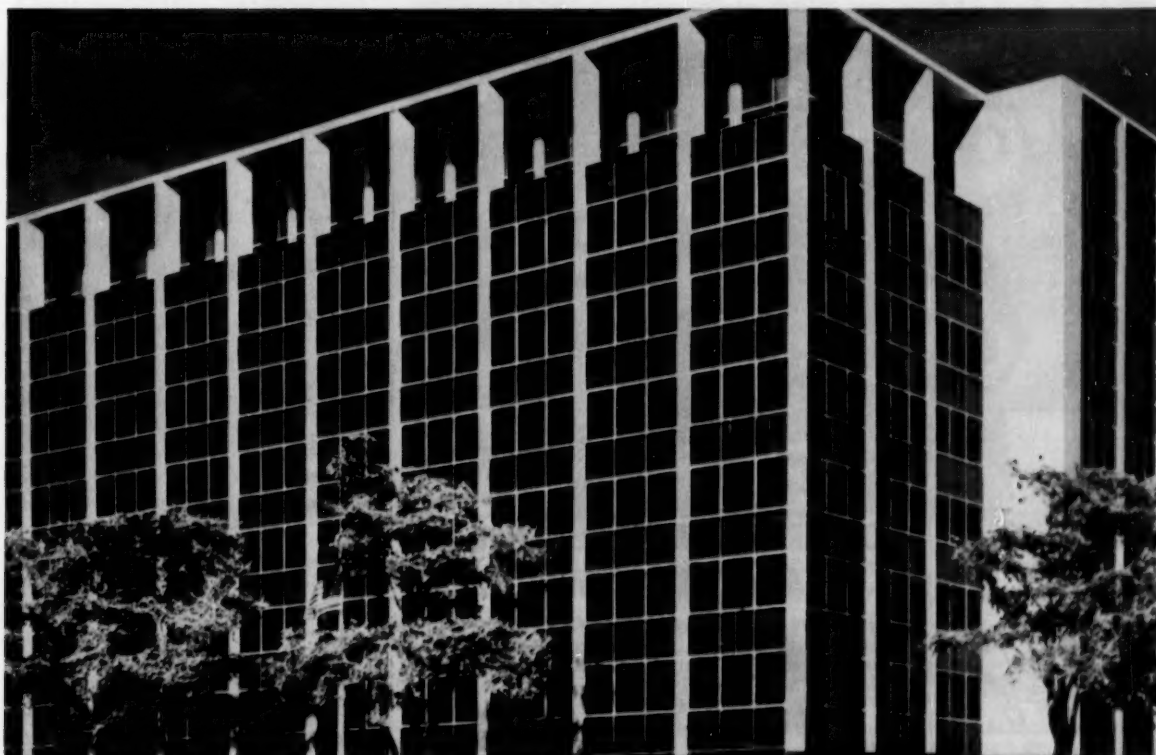
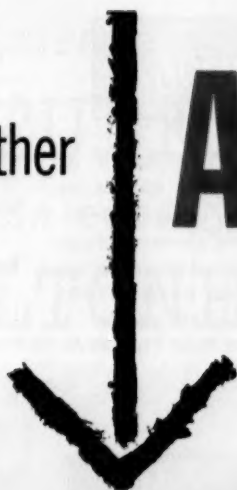
Do you consider it ethical for a teacher to sell to people in the community who are not parents of pupils he teaches? Yes.....61% No.....39%

Do you consider it ethical for teachers to give private instruction (such as music lessons) to the pupils or to tutor for pay while employed by a public school system? Yes.....68% No.....32%

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QUESTIONS AND ANSWERS

Educational Television

How many people have access to-day to educational television?

Twelve million people live in metropolitan areas where educational television stations are now operating; 10 million more live in primary service areas of nine other stations now under

construction. If the populations of areas to be served by 13 stations on which construction will soon begin are added, a conservative estimate places the potential educational television audience within the near future at from 35 million to 40 million people. A minimum of \$25 million can be accounted for in support of the medium.

These facts are given in a special report submitted to the Federal Communications Commission by the Joint Committee on Educational Television, summarizing progress during the two years since the F.C.C. reserved 242 channels for noncommercial educational use.—H.M.

Reporting I.Q.'s to Parents

Should parents be given results of I.Q. tests?

Yes, but . . .

Any parent who expresses a desire to know the mental ability of his child gives evidence of some motivation. The school needs to determine the nature of the motivation in order to interpret properly the results of mental ability tests to the parent.

One parent may ask for this information because he is worried about the poor scholastic achievement of his child. He wants to know if the child's achievement is in line with the child's mental ability. Another parent may want to know his son's mental ability test score so that the boy can be compared with the neighbors' children. Still another parent may wish to find out his child's I.Q. to use a verbal whip, to wit: "I know you can do better in school than you have done. Your teacher told me your tests showed you were bright enough to do 'B' work. Now you either get down to business or else."

Just as parents vary greatly in their reasons for wanting to obtain test results, so teachers have various motivations for wanting to give parents test information. One teacher may feel that he can reduce undue parental pressure on his pupil if he lets the parents know that the pupil is "not very bright." Unfortunately, a few teachers believe that if parents know that the child is not working up to capacity, the parents will use that information to coerce the child to study harder. Yet other teachers want parents to have test information for the simple reason that they believe a parent has a right to know about his child.

Parents and teachers, as the preceding paragraphs point out, have good and bad reasons for wanting to receive or to give test information. Likewise, both have good and bad reasons for not exchanging test information—"The test may not be accurate." "You can't be sure the parent will understand." "I don't believe in tests; I know my boy can do it if he will try." "I know he's not very bright, but he has a lot of

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other good points and these ought to be taken into consideration."

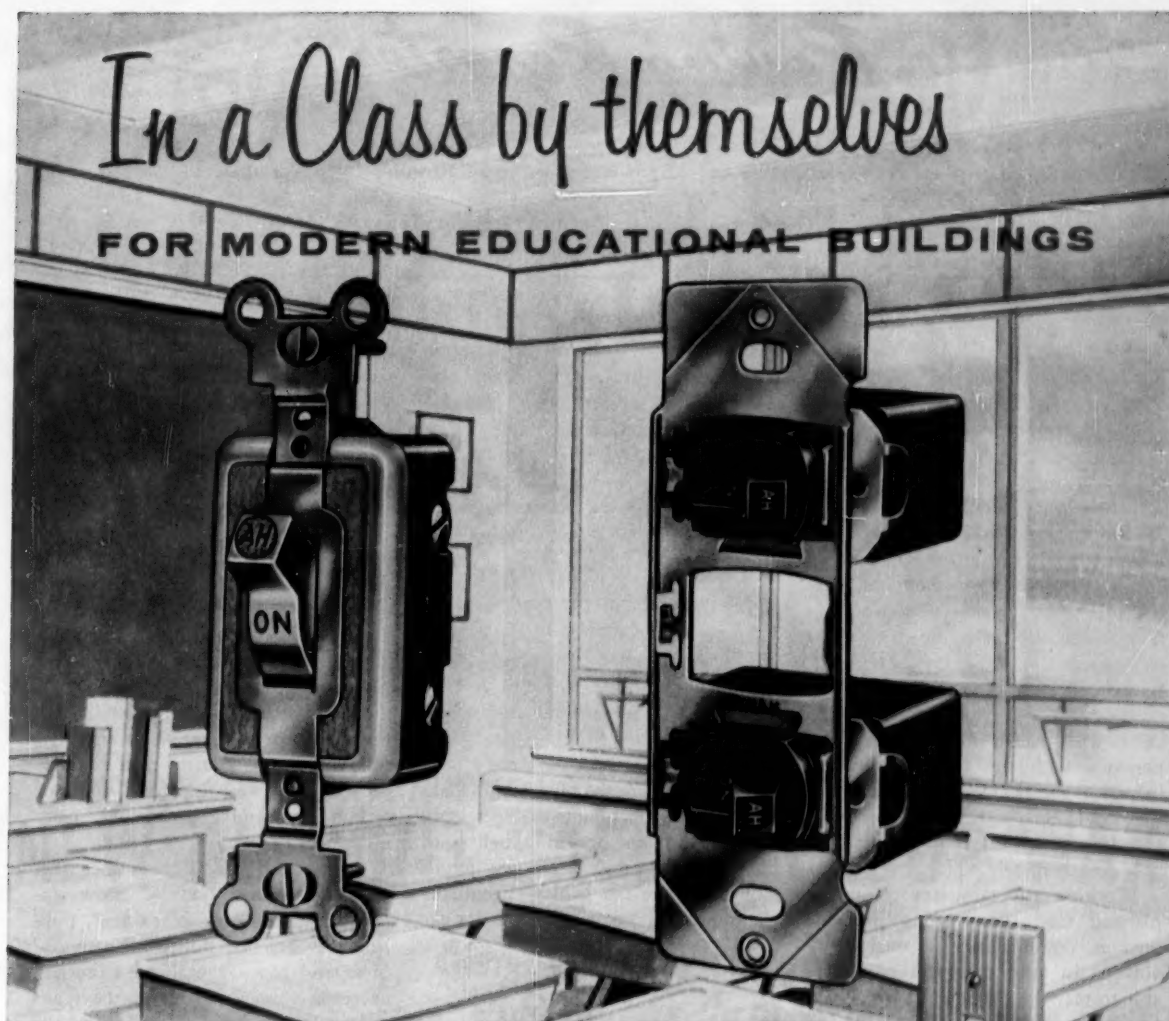
The desire to get or to give test information is not based solely on rational thinking through of how the exchange of information will benefit the child. But the basic question that every person who is called upon to impart test information to parents should be able to answer affirmatively is "Will giving the information help the child?" Before this question can be answered, some judgment concerning the parent's motivation must be made by the teacher.

In practice, this means that a teacher who is asked for test results must do two things. First, he must talk with the parent or determine by other means that the desire for information stems from wholesome and constructive motivations. If he finds, for example, that the parent plans to use the test result in a vindictive or chiding manner, it is better not to reveal the information sought for.

Second, the information must be so interpreted that the parent can understand and use it. For most parents, the I.Q. expressed as a number has little real meaning, although they feign an understanding of it. (Likewise, a few teachers do not seem to understand the concepts basic to an accurate interpretation of an I.Q.) Hence, explanations of test scores in terms of percentile ranks based on local norms, in comparison with the level required for average achievement in school, or predictions of probable success in college are usually more meaningful to parents and also are better received.

A teacher might say, "The mental ability test score of your child places him at about the 75th percentile. That is, his score is higher than that of about 75 per cent of the children in his class." For another parent the interpretation might be, "In view of the mental ability test score of your child, he should earn above average grades but probably will not be in the top group in school." It is never necessary and rarely advisable to report the I.Q. to parents. Rather, the I.Q. should be interpreted in a manner that makes sense to parents.

Should parents be given results of I.Q. tests? Yes, but only if they will use them for the child's benefit. And only if the results are presented in such a way that parents can use them.—CLIFFORD P. FROELICH, *associate professor of education, University of California, Berkeley.*



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Roving Reporter

Sixth Graders Make Movie of "Robin Hood" • Local Families Help Youngsters

In Their Study of Greek History • Science Bulletin Tells All About Mice

THE CURRENT CRAZE for making historical movies has reached the schools, or at least the Mill Plain School in Clark County, Washington.

Patricia Carty and her sixth graders tried a one-reel Christmas movie first and then decided, in the spring, to film "Robin Hood." Before beginning their movie they read in class several books about Robin Hood and about medieval life. In addition, they used nearly a hundred books from the Fort Vancouver regional library bookmobile for reference.

The boys and girls themselves decided what scenes to use. Their experience with the Christmas movie helped them decide how much film they could buy with the money available from candy sales. (The film used cost approximately \$21.)

Working in committees, the pupils planned the action, props, probable settings, costumes and characters involved. In most cases the pupil was able to play the character of his choice. Children, says Miss Carty, are all "hams" at heart, and with this medium those of all levels of intelligence can perform on an equal basis.

Parents made the costumes that could not be made in class. Robin Hood and his men wore long underwear dyed green; their shields were covered with aluminum foil. Some husky and imaginative boys made the necessary scenery.

Actual filming took about a week. Miss Carty used an 8mm movie camera with five rolls of daylight colored film and one roll of indoor film. Indoor scenes were shot in the school gymnasium and outdoor ones at the Portland Zoo, Lackamas Creek, and local farms.

For a scene at Nottingham the pupils used one of their own miniature papier maché castles. Buildings found on a farm were photographed for scenes showing the exteriors of King John's castle and the church. For the tournament bleachers were covered with corrugated paper.

The film was silent, of course; after it had been spliced together the narrative was written to fit. A boy read this narrative when the film was shown to the entire school and to the P.T.A. As background music, "Greensleeves" was tape recorded to run continuously during the 25 minute showing of the movie.

THE "SCIENCE BULLETIN" of Western Junior High School, Bethesda, Md., was started to give pupils information about eight newborn mice—Cleopatra, Julius, Brutus, Nebuchadnezzar, Solomon, Mimi, Atomus and Volta.

The mice were the offspring of Lulu and George, inhabitants of the science room. From the morning bell until bus time in the afternoon pupils stopped to see the babies. Eventually the inquiries became too much for the



busy teacher to handle. So a bulletin stating briefly the progress of the mice was placed outside the door of the science room.

Soon pupils began pencilling in other items of departmental interest. Then a 13 year old boy was put in charge of the bulletin, making it a weekly affair that gave passers-by in the corridor news of local science happenings.

But there were limitations. The editor thought the bulletin was not reaching enough people and that those passing by in the corridor didn't have time to read all of the news. So he requested permission to begin issuing a mimeographed sheet that could be distributed to all pupils.

Arranged in two vertical columns were news items, personality sketches

of animals in the department, such as a hamster, mice, frogs and insects, and odds and ends of strange scientific information. Later issues also included news from related departments, some scientific verse, and borrowed and original cartoons.

An assistant editor was added to the staff after the editor broke his arm and there was no one but the faculty adviser to put out the *Science Bulletin*. Later a spelling editor and general proofreader was added to the staff. About the same time a special editor in charge of mice was appointed. This was necessary not only because by that time there were so many mice but also because they were the focal point of certain important experimental breeding work.

At the end of the year the staff, with the cooperation of those appointed to the next year's staff, published a "Science Bulletin Yearbook" of several pages, containing editorials, excerpts from highlights of the year's news, favorite cartoons and verse, and odds and ends of information.

WHEN SIXTH GRADERS at Jefferson School, Mason City, Iowa, began studying Greek history, they remembered that there were families of Greek descent in the community.

So boys and girls visited these families to learn about the domestic culture of an old civilization. They were lent articles to be displayed in their classroom, articles their hosts had purchased on recent visits to Greece. These included hand-made tablecloths, dolls in Grecian costume, vases, a handbag, a necklace, and a cup.

A pupil prepared several samples of Greek writing—the Lord's Prayer, the alphabet, and a vocabulary list. All of the members of the class made soap carvings of Greek figures.

One afternoon the pupils entertained their mothers at the school. The Greek lunch they prepared consisted of koulouia (cookies), laukoumia (candy), stafithis (raisins), and café.

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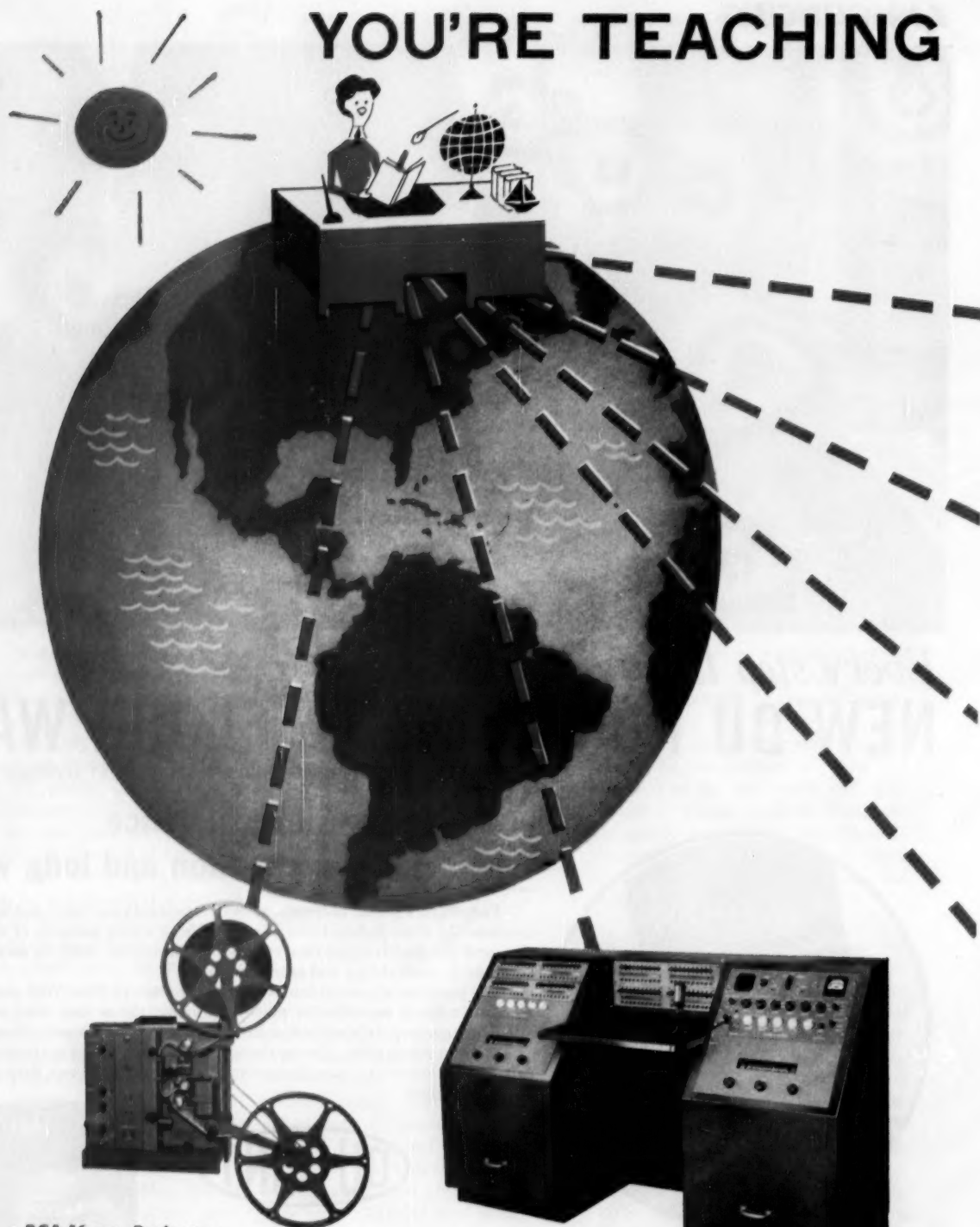
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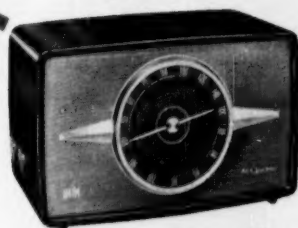
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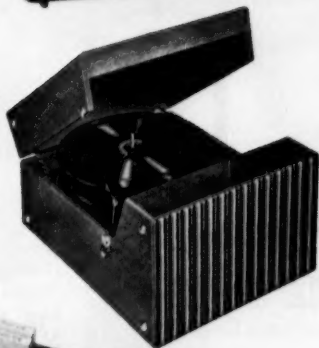
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You've heard of many forward moves by our company in the past—culminating in Nesbitt Syncretizer with Wind-o-line. Now we present one of the most transforming innovations yet developed by Nesbitt engineers—the use of Wind-o-line Radiation in a *Series Hot Water System*—which permits the grouping of several classrooms (or an entire wing of a building) in separate circuits . . . in which the Wind-o-line is *the only supply and return piping required*. This ingenious method (applicable when forced hot water is the heating medium) is particularly designed to match today's trends in heating and construction. It provides improved individual room control of heating and ventilating; offers all weather protection against cold window downdraft; and at the same time saves many dollars of installation cost.



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In the first place, you save the cost of pipe trenches (at \$8 to \$12 a foot) running around the perimeter of the building.

These are now unnecessary, because the Wind-o-line piping takes the place of the usual mains. In addition, you save the cost of these mains. Your piping problem is simplified. You cut pipe-covering costs by one-third to one-half (Wind-o-line piping needs no insulation).

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Finally, this one system provides its own overnight temperature protection. No additional investment for such protection is necessary.

**Besides saving you money,
the *Series Wind-o-line System* increases
classroom comfort and protection!**

This system is ideally suited for modern classrooms with large banks of windows. In such rooms, and in those with cold exposed walls, perfect comfort for the occupants cannot be achieved simply by maintaining the optimum room temperature. Downdraft from cold walls and windows and the radiant heat loss from occupants to cold surfaces are problems calling for special, separate handling. Nesbitt Wind-o-line Radiation solves these problems logically and effectively by releasing a moderate gravity heat continuously along the window sill when outdoor temperatures make protection necessary. The air from the Wind-o-line mixes with and warms the downdraft, and diverts it upward over the heads of the occupants. Radiant heat from the Wind-o-line enclosure helps to offset the bodily heat loss to cold wall and window surfaces. With the *Series Wind-o-line System*, water temperature is varied in accordance with outdoor temperature. As the outside temperature falls, the temperature of the water increases so that protection against the effects of window downdraft and cold surfaces is related directly to their intensity. In addition, individual room control of temperature and ventilation by the Syncretizer is greatly facilitated. Without other investment in auxiliary convectors or special control equipment the gravity heating capacity of the *Series System* is more than sufficient to maintain satisfactory overnight classroom temperatures. This is a great boon to daytime comfort and a very considerable saving in equipment costs.



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Nesbitt
SERIES WIND-O-LINE SYSTEM
for Forced Hot Water Heating

Increases
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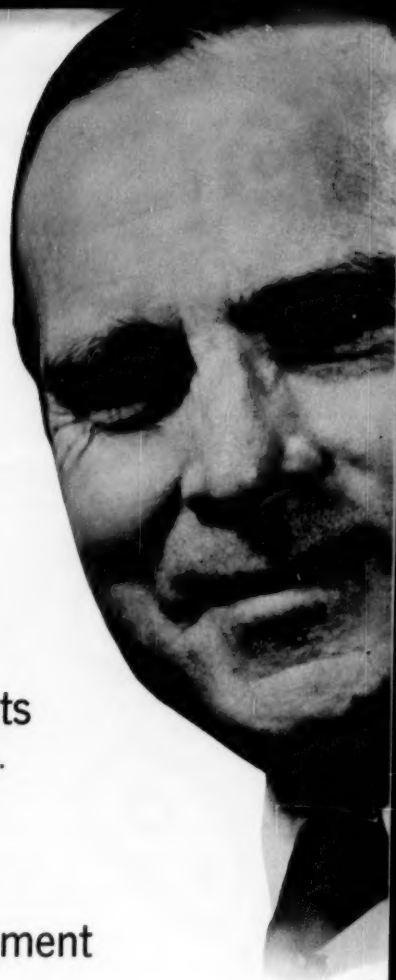
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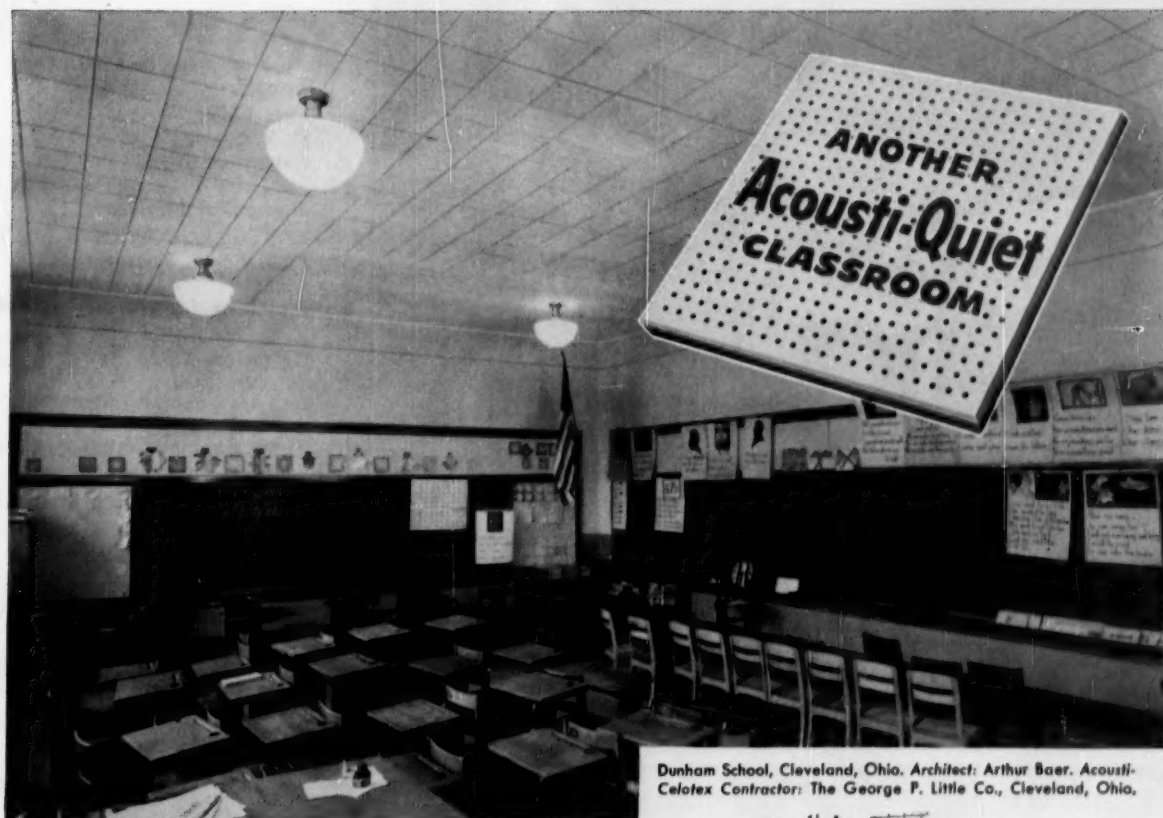
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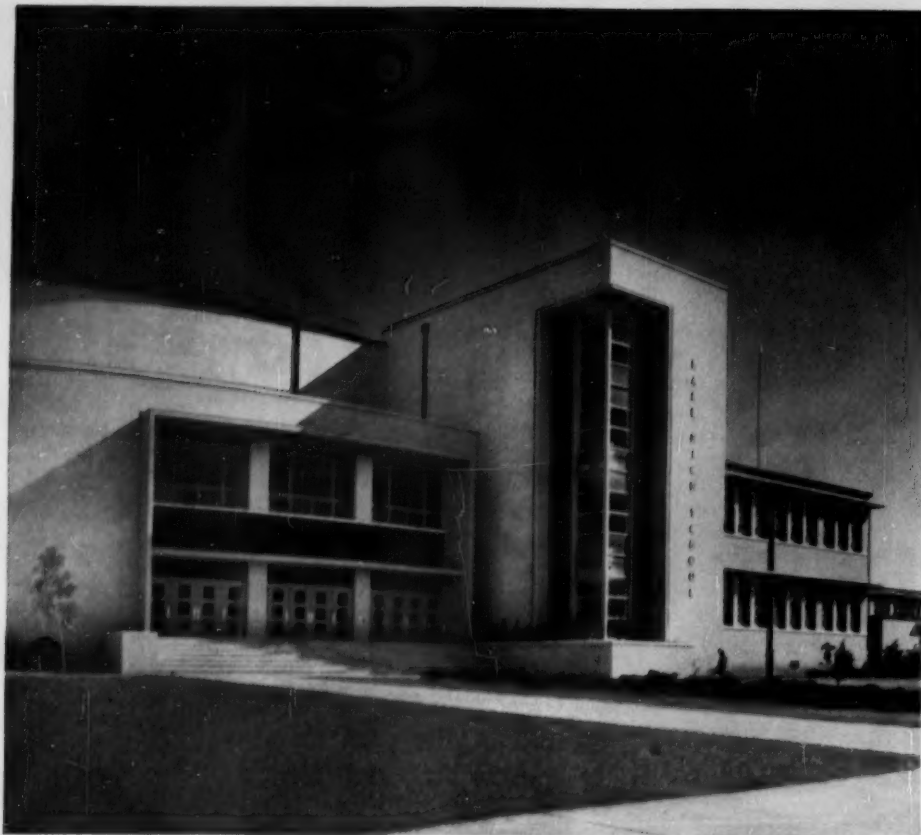
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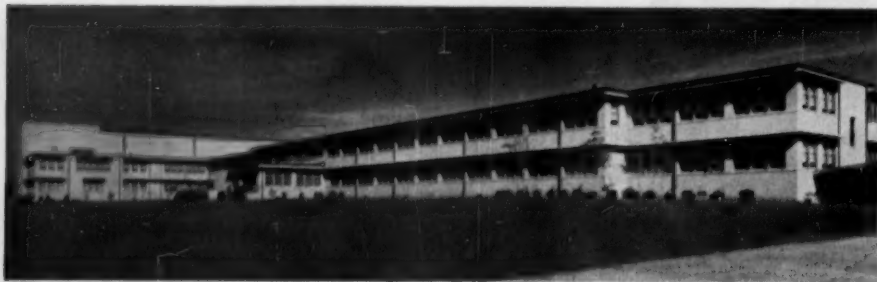
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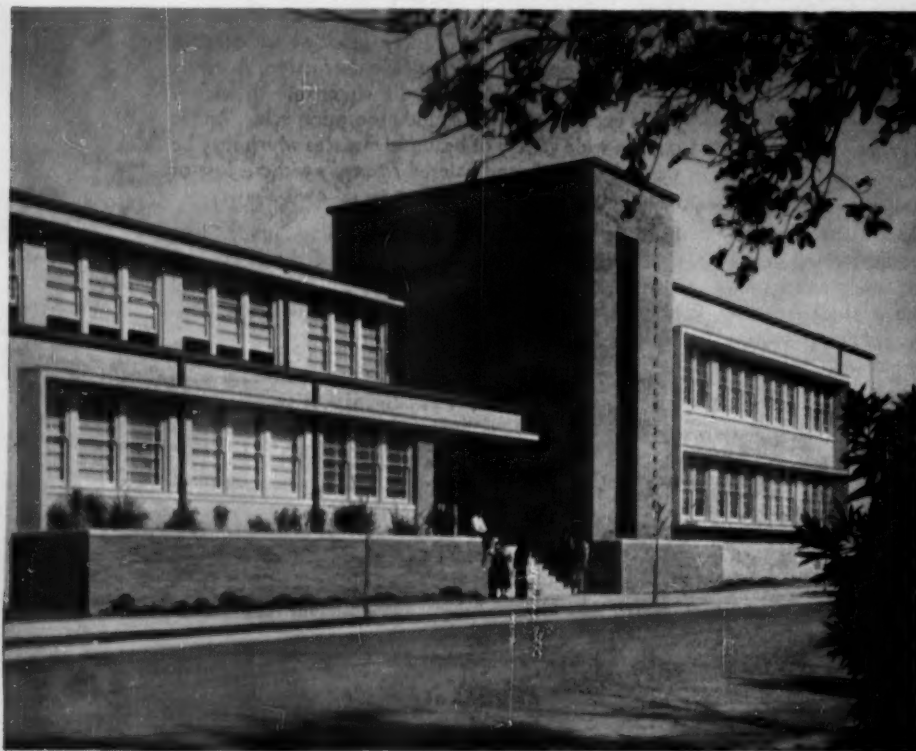
City Zone State



BALL HIGH SCHOOL, GALVESTON, TEXAS • See Rear View Below



Below: CENTRAL HIGH SCHOOL, GALVESTON, TEXAS



Architects for both buildings
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Fort Worth, Texas
R. R. RAPP,
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Mechanical Engineers
YANDELL, COWAN & LOVE
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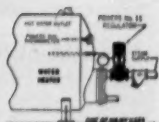
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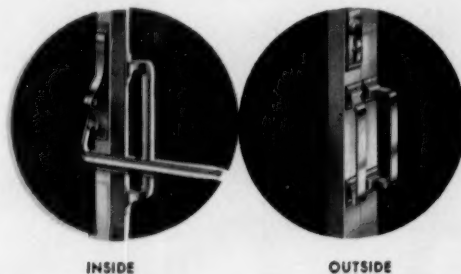
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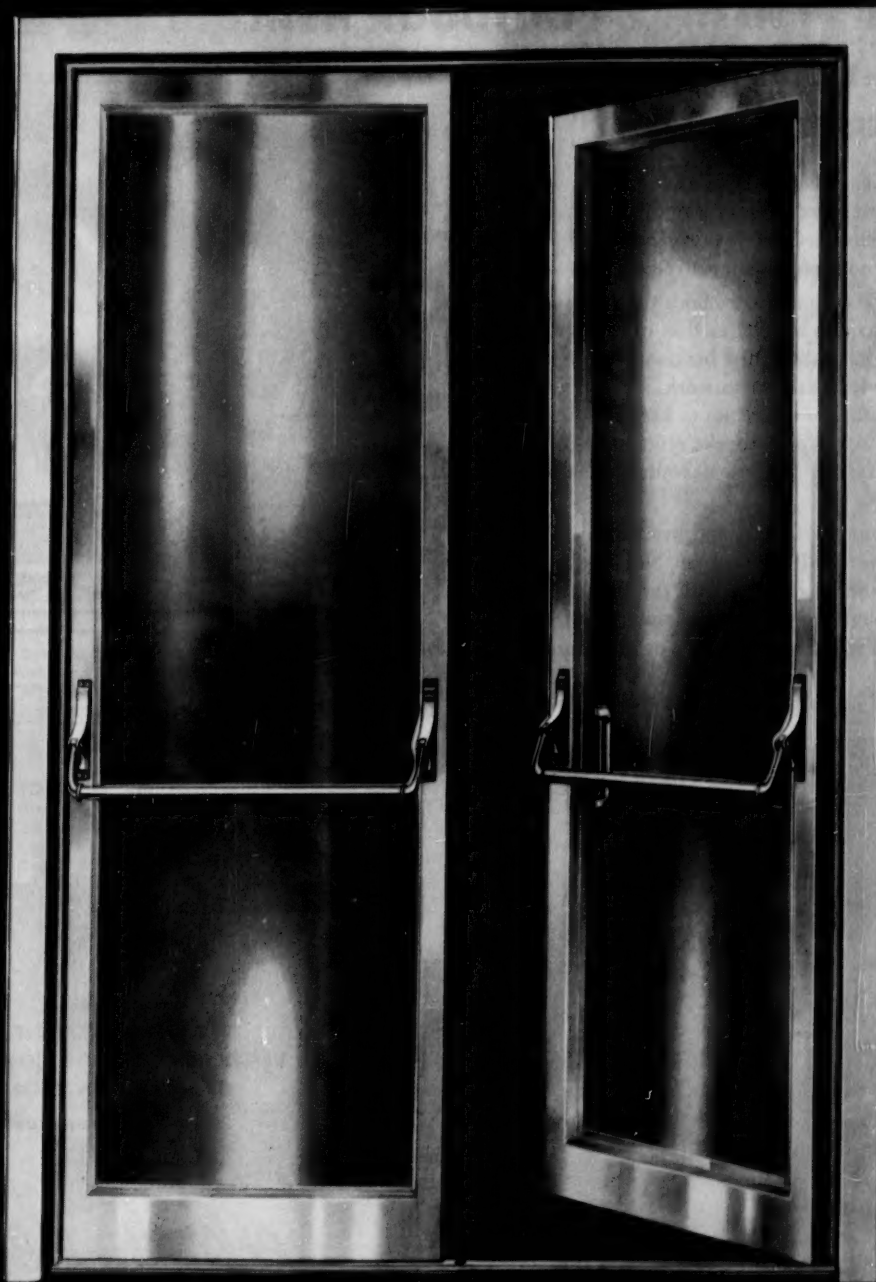
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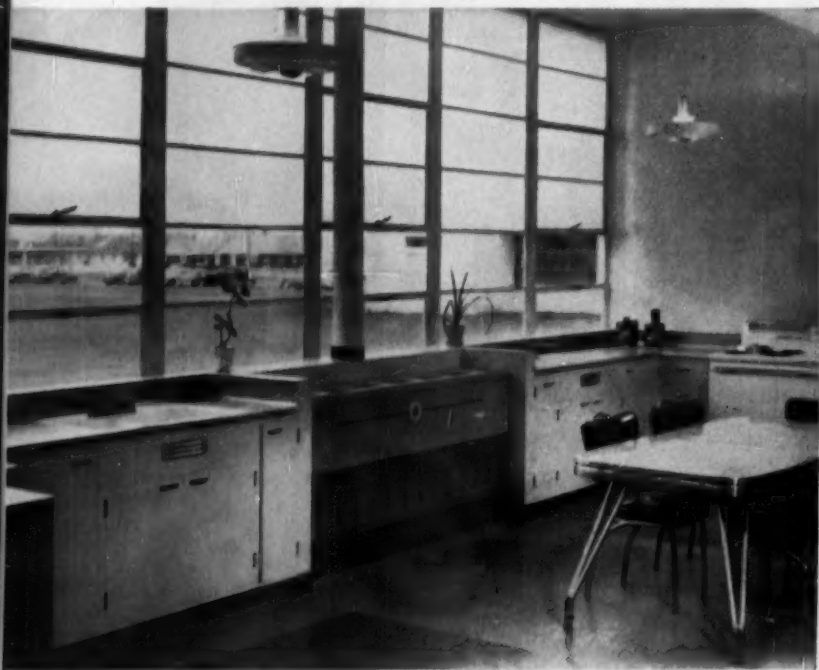
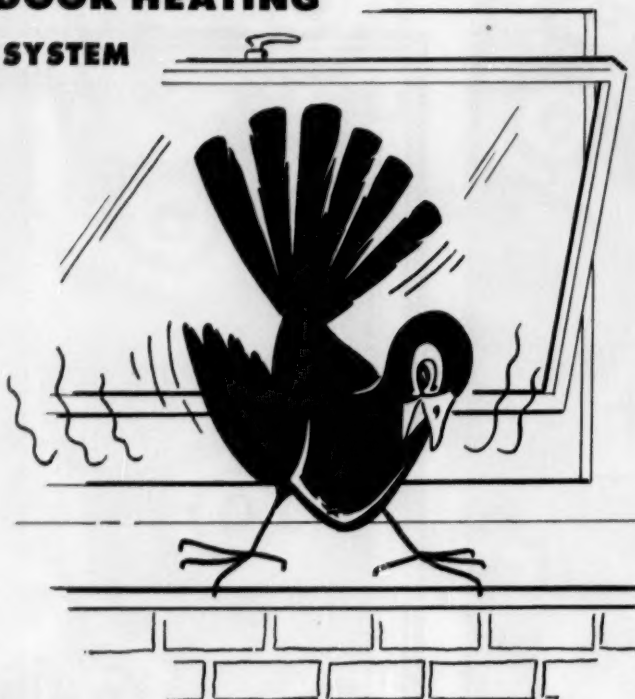
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Herman Nelson DRAFT|STOP eliminates both the waste and worries of overheating. In fact, the major function of this system during school hours is to cool rather than heat. As sun, lights and students add to the heat load, it goes to work, automatically introducing outdoor air in sufficient quantities to keep room temperature at comfort level. And, to complete the economy picture, Herman Nelson eliminates chilling window downdrafts without the use of heat.

Why pay a premium for open windows and overheated classrooms? All the comfort features of the Herman Nelson System are yours at a saving—a saving that starts with the first day of operation and continues through the years. For complete information, see our catalog in Sweet's Architectural File, or mail coupon on adjoining page.



WASHINGTON. They cook in comfort at Pasco Senior High School, Pasco, Wash. Note cavity wall construction which permits passage of lally column through outdoor air opening of the Unit Ventilator—another example of the flexibility in Herman Nelson design. Superintendent of Schools: Herman F. Jaeger; Architect: Victor Louis Wulff; Engineers: Kendall M. Wood & Associates.



Provides
**COOLING, HEATING
VENTILATION, ODOR CONTROL
DRAFT ELIMINATION**
All at minimum cost

herman nelson
UNIT VENTILATOR PRODUCTS

AMERICAN AIR FILTER COMPANY, INC.

SYSTEM OF
CLASSROOM COOLING, HEATING AND VENTILATING

"for the Birds"!



MICHIGAN. Long, low and handsome. Edmonson Elementary and Junior High School, Willow Run, Mich. Installation cost of Herman Nelson DRAFT|STOP System was materially reduced by laying piping on depressed slab in exposed perimeter trench (see inset), with unit ventilators and utility cabinets serving as cover. Superintendent of Schools: Albert C. Johnsen; Business Manager: A. A. Wiench; Architect and Engineer: W. T. Anicka; Mechanical Contractor: United Heat Engineering Co.

TENNESSEE. Strictly modern and modest in cost. The new C. T. Kirkpatrick School, Nashville, Tenn., featuring Herman Nelson DRAFT|STOP Unit Ventilators, was built at a cost of \$9.60 per square foot. Superintendent of Schools: W. A. Bass; Architects: Taylor & Crabtree; Engineers: I. C. Thomason & Associates.



OTHER

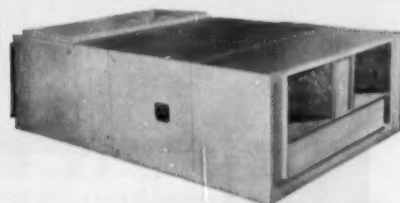
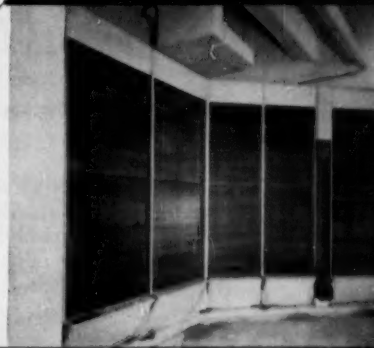
AAF



SCHOOL PRODUCTS

CLEAN AIR CUTS MAINTENANCE COSTS

AAF Multi-Duty Self Cleaning Filters assure clean air automatically for air conditioning system serving Berkeley (Calif.) High School auditorium.

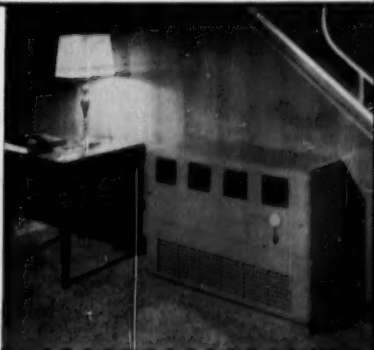


A VENTILATING UNIT WITH THE "HUSH" BUILT-IN

Herman Nelson Auditorium Unit Ventilator, featuring the exclusive acoustical silencer for "whisper quiet" operation, is the answer to heating, cooling and ventilating multipurpose rooms, cafeterias and other large space areas.

SOLUTION TO SPOT HEATING PROBLEMS

Herman Nelson Console Heaters are ideal for heating entrances, corridors and other isolated spaces. Available in twelve attractive models for floor, wall, ceiling or inverted placement.



American Air Filter Co., Inc.
Dept. NS-4
Louisville 8, Kentucky

I would appreciate receiving literature describing the following products:

- ☐ Classroom Unit Ventilators
- ☐ Multi-Duty Air Filters
- ☐ Console Heaters
- ☐ Auditorium Unit Ventilators

Name _____

Address _____

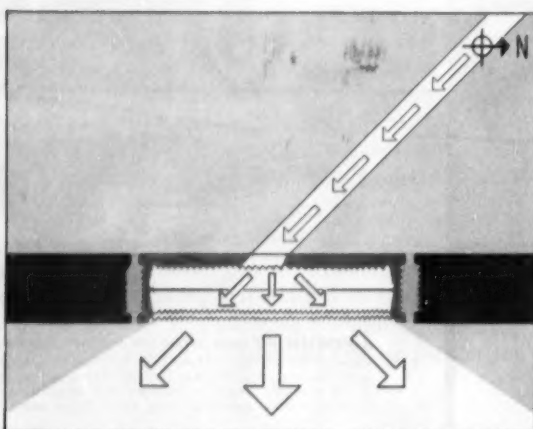
City _____

State _____

TESTED AND PROVED

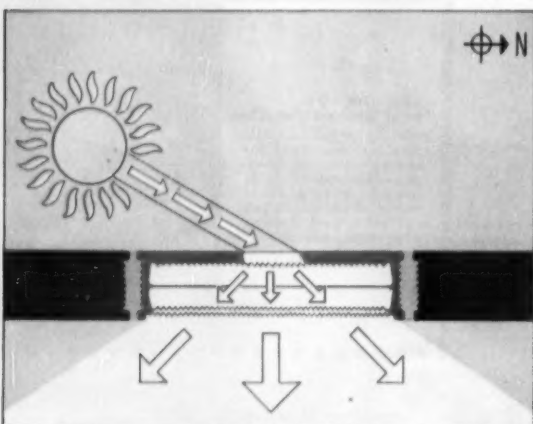
Glass panels bring cool daylight in through the roof

Light-Selective Toplite Roof Panels transmit desirable
light; reject hot, glaring sun



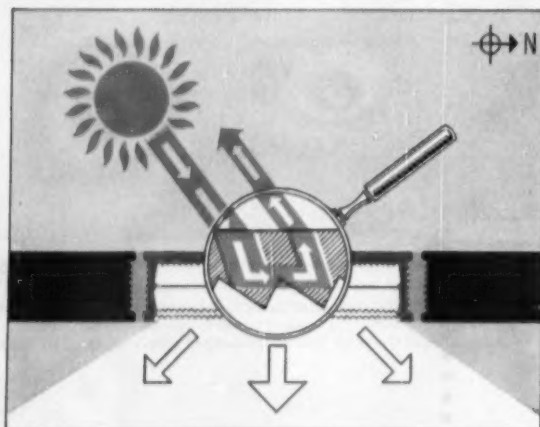
Transmits north light

Maximum transmission of north light is a desirable quality in toplighting because of its uniformity and freedom from glare and solar heat. Note how the prism structure of Toplite affords efficient transmission of north light.



Accepts winter sun

Since low winter sun is comparatively weak in relation to high summer sun as far as glare and solar heat are concerned, maximum transmission is again desirable. This illustration shows how Toplite accepts and transmits winter sunlight.



Rejects summer sun

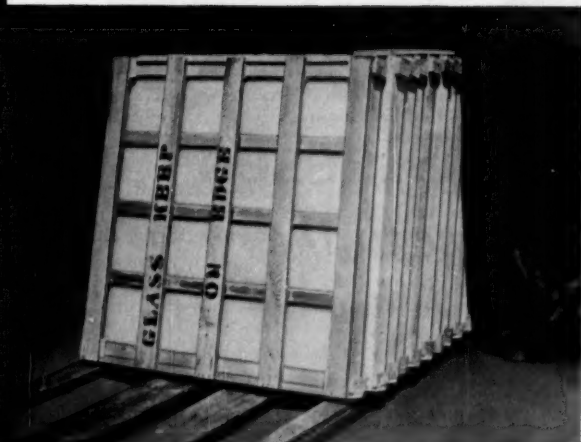
Other materials which transmit north light and low winter sun also transmit high percentages of light during the hot, summer months. Toplite rejects direct light and heat from hot, summer sun, but transmits much of the cool, north light.



**Toplite installation at
Campus Elementary School
New Jersey State
Teachers College
at Glassboro—
Glassboro, New Jersey
Dr. Thomas Robinson, President**

Toplite Panels may be installed in continuous strip, pattern, or in individual panels. Use a Toplite panel as you do a lighting fixture. They permit daylighting of all building areas regardless of location or distance from exterior walls.

Edwards and Green, Camden, N. J., Architects
S. Levy & Company, Camden, N. J., General Contractor



Toplite Roof Panels are factory-fabricated . . . ready to install

They are shipped in individual crates marked to show correct orientation and directional positioning; for speed and ease in installation. Panels arrive on job site ready to install. They are set on prepared curbs and anchored ready for flashing by the roofer.

Write for free booklet on Toplite Roof Panels

The complete story of this great new advance in efficient utilization of free daylight is available in this new bulletin. For your free copy write today: Kimble Glass Company, subsidiary of Owens-Illinois, Dept. NS-4, Toledo 1, Ohio.

TOPLITE ROOF PANELS
AN **®** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO



CEDARS OF LEBANON HOSPITAL

4025 FOURTH AVE.
LOS ANGELES 29, CALIFORNIA

Libbey Glass
Division of Owens-Illinois
Toledo 1, Ohio

Gentlemen:

We have kept an accurate check of the service of our Libbey Heat-Treated Glasses, and have found them to have an almost endless life. In fact, they last so long that the cost of each serving is so small it is almost impossible to figure it. That's mighty important to an organization like ours where we must effect every economy yet always give the best in care and service.

Very truly yours,

William L. Anderson

William L. Anderson
Purchasing Agent
CEDARS OF LEBANON HOSPITAL



Illustrated on this attractive tray are Libbey Heat-Treated Glasses No. 606 (left) and No. 610 (right).



Libbey Heat-Treated Glasses

*give efficient, low-cost service at the
Cedars of Lebanon Hospital,*

LOS ANGELES, CALIFORNIA

MORE THAN 16,000 patients a year are benefited by the most modern care and treatment facilities of the Cedars of Lebanon Hospital. In its free clinic, over 100,000 visits per year are made by patients who cannot afford private care. For its glassware service the hospital selected Libbey Heat-Treated Glasses. Are they satisfied? We think

the letter shown above speaks for itself.

Libbey Heat-Treated Glasses are specially processed to stand up 3-5 times longer than ordinary tumblers under the heaviest service conditions. They take hard knocks and sterilization temperatures in stride. Through reduced breakage, you need fewer glassware replacements, smaller inventory,

less storage space. And you get additional savings through Libbey's chip-resistant rims, guaranteed: "A new glass if the rim of a Libbey 'Safedge' glass ever chips."

Your Libbey Supply dealer is ready with all the details. Call him today or write Libbey Glass, Division of Owens-Illinois, Toledo 1, Ohio.

LIBBEY SAFEDGE GLASSWARE
AN **①** PRODUCT

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

What our school needs is a freezer!



Chart used to teach food freezing

That's what you'd expect students to say if your school's home economics teachers merely *told* them how to use a food freezer, without an actual demonstration. You need actual freezers in the laboratory to give students practical experience with this appliance. They need instruction not only in the latest freezing methods, but about the time and money that can be saved—through safe storage of commercially frozen foods, as well as on shopping, meal preparation and serving. The need is there because six million homes now have food freezers, and

the total is growing by nearly a million a year.

For visual aid in her classes, the teacher also needs the Freezer Teaching Kit, of which 30,000 sets have now been distributed. Home economics teachers everywhere are using this modern teaching aid. But practically all of them will tell you that . . .

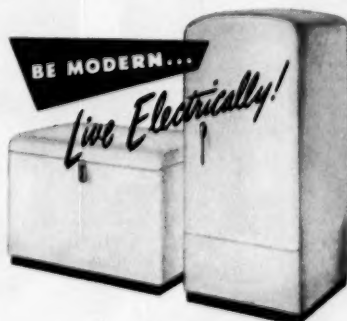
You need freezers to teach food freezing. Freezers are moderate in cost, and do not need special wiring. If your school doesn't have modern home freezers, your local electric light and power company, or electric appliance dealer will tell you how easy it is to obtain and install them.

If your school does not have the **FREEZER TEACHING KIT...**

This FREE Kit provides visual aid for home economics teachers, to simplify freezer instruction in the classroom. It consists of 12 beautiful, full-color wall charts and Home Freezer Teaching Guide. Be sure each of your schools has a Kit. Send for it yourself and present it to the home economics teacher.

FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • BENDIX • CROSLEY
FRIGIDAIRE • GENERAL ELECTRIC
HOTPOINT • INTERNATIONAL HARVESTER
KELVINATOR • NORGE • PHILCO
QUICFREEZ • SEEGER • WESTINGHOUSE



FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
155 East 44th Street, Dept. NS-4-55
New York 17, N. Y.

Please send me, absolutely FREE, the NEMA Freezer Teaching Kit.

Your name and title.....

Address.....

City.....Zone.....State.....

MORE SCHOOL FOR THE MONEY ...WITH CRANE

Today, hard-won school building funds have bigger-than-ever jobs to do. They must give us *more school* to handle expected zooms in enrollment. And must give us schools that last longer under these heavier student loads.

Crane fixtures can help do both jobs.

First, because Crane plumbing fixtures last years longer even under the most severe conditions . . . as proved in thousands of schools, colleges and universities. Crane fixtures made of vitreous china or porcelain enameled cast iron are easy to clean and keep clean, which helps to reduce maintenance cost.

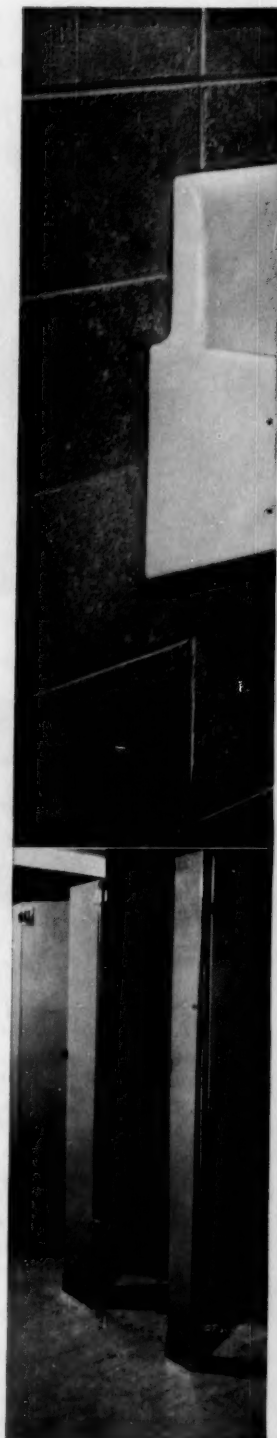
Second, because Crane precision engineering appreciably reduces maintenance and repair costs. Exclusive Dial-ese lavatory controls conserve water, contain all moving parts in a single, removable cartridge for easy maintenance and repair.

That's why, when your architect specifies Crane fixtures, you can be sure that you are getting more school for the money . . . and plumbing fixtures that will adequately serve your needs for many, many years.

Let your architect and contractor know your preference for Crane.

Crane school fixtures were used throughout in the new Hyde Park School in Waukegan, Illinois. Top—Crane Waterfall drinking fountain with Purflow angle stream bubbler and automatic flow regulator; lower left—Crane Correcto urinals and Santon closets; lower right—sink with two Crane faucets and drinking fountain faucet in classroom.

Architect: Ganster and Hennighausen, Waukegan, Illinois
General Contractor: Hansen & Warhane, Lake Forest, Illinois



CRANE

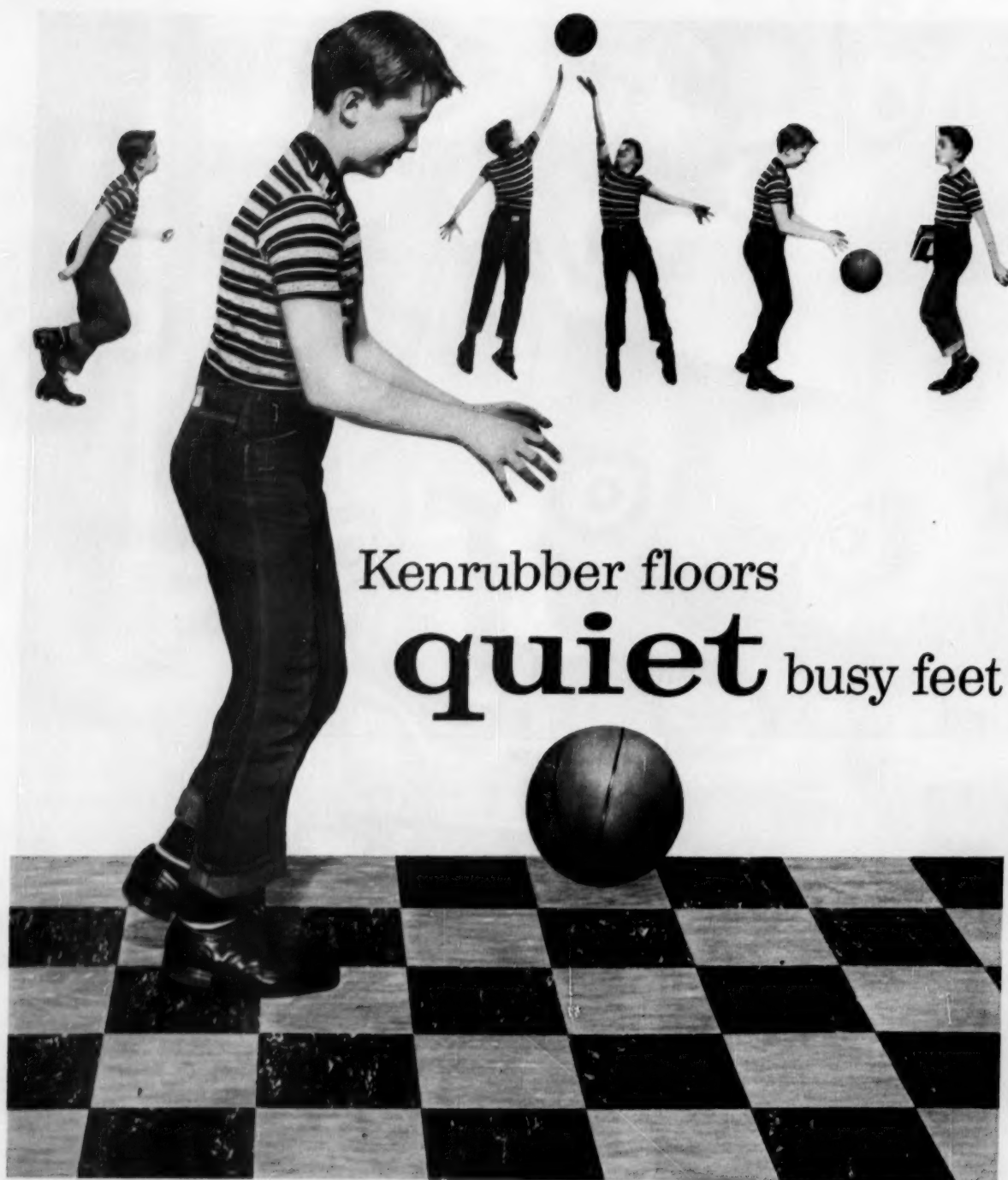


CRANE CO.

General Offices: 836 S. Michigan Ave., Chicago 5, Ill.
VALVES • FITTINGS • PIPE • KITCHENS • PLUMBING • HEATING

**CRANE STARTS
ITS SECOND CENTURY
OF QUALITY**

Founded July 4, 1855

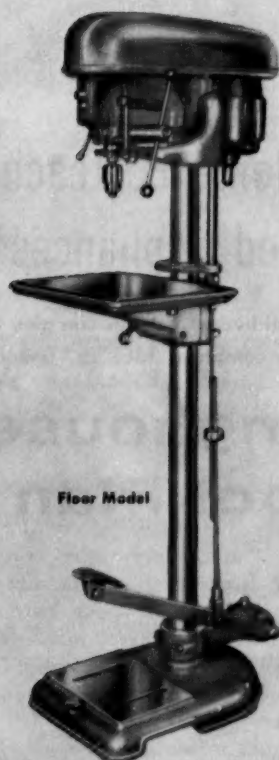


Here is flooring so lastingly resilient you'd think coiled steel springs were imbedded in each tile! That's how KenRubber Floors cushion every footfall, hush the din of constant traffic in rooms and corridors and help reduce fatigue for all who walk. KenRubber's pre-polished surface resists dirt and stain...crisper, clearer, tile-deep colors stay fresh, and sparkling clean with minimum maintenance effort and expense. Wherever durable long-wearing floors are needed...KenRubber offers these *extra* advantages no other floor can equal. For further information contact your Kentile, Inc. Flooring Contractor.

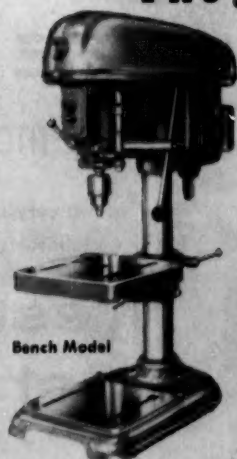
KENRUBBER TILE FLOORS®

KENTILE, INC., 59 2ND AVENUE, BROOKLYN 15, N. Y.
KENTILE • KENCORK • KENRUBBER •
KENFLEX • KENFLOR •

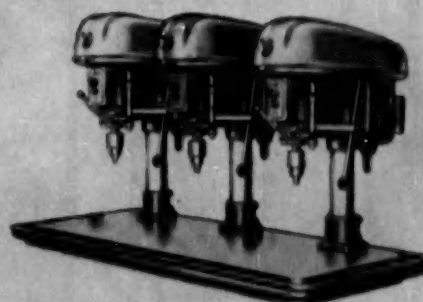
*REG. U. S. PAT. OFF.



Floor Model



Bench Model



Multiple Spindle Set-ups

The All-New DELTA 14" Drill Press

The world's most widely used
industrial drill press line
now finer than ever!

New in everything but price!

New IN SAFETY: Many new safety features such as fully enclosed spindle that has *side opening* for easy changeover, enclosed belt and pulley guard, safety-recessed push button starter up front available as an accessory make the new Delta 14" drill press safer than ever for student use.

New IN CONVENIENCE: Quick-set depth gage for faster, more accurate depth of penetration readings . . . Self-locking Depth Stop with micrometer settings calibrated in steps of .002" . . . Tilting Table with positive stops and calibrated scale . . . those are just a few of the new features which make it so easy to do precision work on the new Delta 14" drill press.

New IN VERSATILITY: You can teach countless operations on the new 14" Delta—drilling, counter-boring, tapping, routing, shaping and dozens of other jobs. You can use it on wood, metal, plastics. In fact, you'll find the new Delta 14" Drill Press one of the most useful and versatile teaching aids in your shop.

Remember, **ALL Delta Tools PROVIDE DOUBLY-VALUABLE TRAINING** because they are the **SAME** tools with which many of your students will earn their living after leaving school!

See It Now! There's so much that's new and better about the new Delta 14" Drill Press that you've got to see it to appreciate it. Call your Delta Dealer for a demonstration (he's listed in the classified pages of your phone book under "TOOLS" or "MACHINERY") or send the coupon.

DELTA QUALITY POWER TOOLS
Another Product by **ROCKWELL**



DELTA QUALITY COSTS NO MORE

Delta Power Tool Div., Rockwell Manufacturing Co.
406-D N. Lexington Ave., Pittsburgh 8, Pa.

- ☐ Please send me the name of the nearest Delta Dealer who has the new 14" Delta Drill Press on display.
- ☐ Please send me complete catalog information on new Delta 14" Drill Press.

Name _____ Title _____

School _____

Address _____

City _____ County _____ State _____



FREE Home Ec Teachers from out-moded appliances!

Even with a very small budget, schools can give their home ec laboratory a complete "face lift" under the

Westinghouse School Plan

Up-to-the-minute appliances free teachers of humdrum classroom sessions. Students become enthusiastic about learning better homemaking practices when lessons are keyed to *today's* methods.

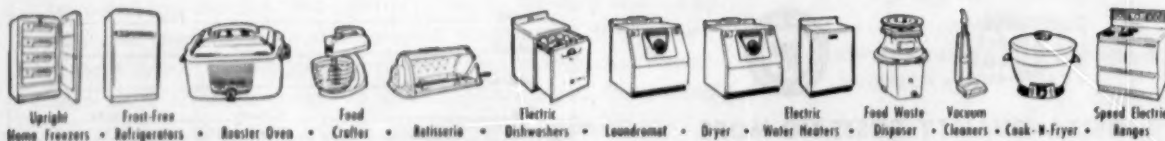
The Westinghouse School Plan helps you step up interest in your home economics program . . . even with a very low yearly budget. Here's how it works:

1. Schools buy new Westinghouse appliances at approximately $\frac{1}{2}$ retail cost . . . 1 or as many as you need.
2. Appliances are replaced with new models each year thereafter *at no further cost*. Year after year, school budget funds can be used to buy additional new appliances which are kept up to date under the no-charge replacement plan. So, with only a small investment each year . . . \$300 for example . . . in a surprisingly short time your whole home ec laboratory can be entirely equipped with the newest equipment. What a boon to students and teachers both!
3. Yearly replacements practically eliminate maintenance expense.
4. Helpful teaching aids are supplied without charge.

Free folder gives complete details—Order copies for yourself and others concerned with the purchase of teaching equipment. Offer limited to continental U. S. A. Write to:

**Westinghouse Electric Corporation • Electric Appliance Division
Consumer Service Department NS-455 • Mansfield, Ohio**

**YOU CAN BE SURE... IF IT'S
Westinghouse**



Upright • Frost-Free • Refrigerators • Roaster Oven • Food • Food • Electric • Dishwashers • Leandromat • Dryer • Electric • Water Heaters • Food Waste • Vacuum • Cleaners • Cook-N-Fryer • Speed Electric • Ranges

Architect: Raymond Viner Hall, A.I.A.

PC FUNCTIONAL GLASS BLOCKS have long been famous in classroom walls because they gather up daylight and throw it far into the room (special prisms in the blocks do the job). But lately many schools have been designed with classrooms that are deeper and lower than ever before. This is a wonderful cost saving measure, but it cuts down the daylighting for the kids on the inside row.

To answer this problem, Pittsburgh Corning came up with a glass block specially designed for toplighting—the PC Skytrol Block.



The kid on the inside row

Panels of Skytrol blocks overcome the problems of ordinary skylights. As each block contains *two* insulating air spaces, it won't "sweat." And the special design filters and diffuses the daylight so that students and teachers get plenty of light without harshness.

Skytrol blocks can be used in any type of school — in classrooms, corridors, gyms, shops, etc. Most important: the installed cost is *less* than for any comparable toplighting system, and maintenance is practically non-existent.

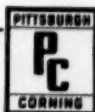
For more information on Skytrol write Pittsburgh Corning Corporation, Dept. AK-45, One Gateway Center, Pittsburgh 22, Pa. Turn two pages ahead for coupon.



gets a break



SKYTROL®
GLASS BLOCKS



ALSO PC GLASS BLOCKS AND FOAMGLAS®



Architects: Lamont H. Button and Paul F. McLean • AIA • Pittsburgh, Pa.



"I've never seen a school with better daylighting,"



says **Thomas J. Kelly, Ed.D.**, *Superintendent of Schools*
West Mifflin Borough, Pa.

Look at West Mifflin Borough if you want to see a fast growing community. The population is expected to *triple* in the next ten years. The borough is facing this problem head-on, with a fast-stepping school building program.

Latest school to be put into service is the Edison Junior High School shown here. This is a *complete* school plant, with cafeteria, 600-seat auditorium, many special purpose rooms and a fully-equipped health suite for medical, dental and audiometric examinations.

But when you see the school and enter it, the first thing you notice is the superb daylighting made possible with PC Glass Blocks. After the school was erected, complete light distribution readings were

taken and compared to other nearby schools. In the words of Dr. Kelly, "There was an amazing difference between the daylighting in this school and the others. We'll stack it up against any other school."

How about future plans? Dr. Kelly says, "We intend to continue the use of glass blocks for new schools and the remodeling of old ones, because they do promote the visual climate we want for children. Equally important is the low maintenance. We have had no breakage, and the custodian can wash the panels with a garden hose."

Do you want these advantages in your new schools? Ask your architect for more information or write Pittsburgh Corning Corporation, Department AK-45, One Gateway Center, Pittsburgh 22, Pa. Turn page for coupon.

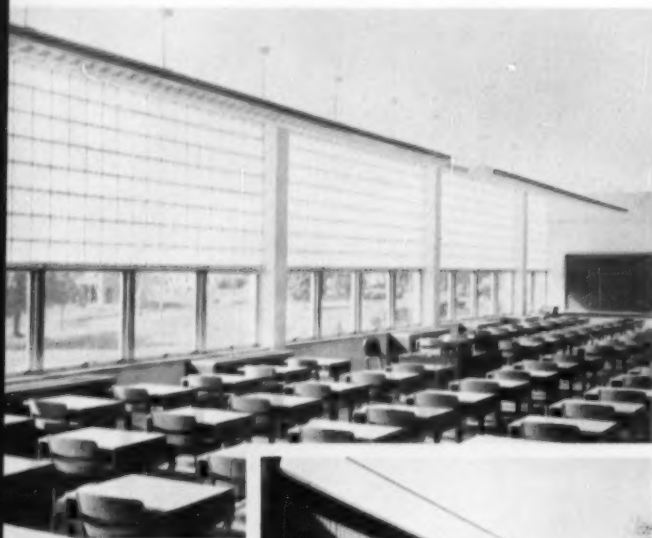
PC Glass Blocks



ALSO SKYTROL® AND FOAMGLAS®



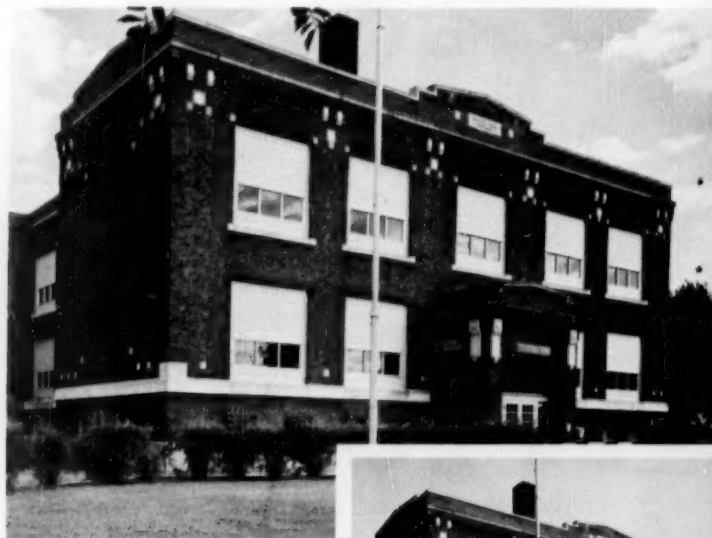
Here's better daylighting and good looks ...with PC Glass Blocks



When you build



Consult with your architect on the advantages of including PC Glass Blocks in the new buildings you may be planning.



When you modernize



If your plans include remodeling old buildings, you'll do well to modernize the window areas by installing PC Glass Blocks.

PC Functional Glass Blocks diffuse and distribute valuable daylight to all areas of the room and there are patterns available to solve every daylighting problem. Panels of PC Glass Blocks impart clean, architec-

tural lines to new buildings, and give a decided lift to the appearance of older structures.

Maintenance costs are kept to a minimum as PC Glass Blocks only have to be cleaned once or twice a year, breakage is practically non-existent and there is no sash to require painting or repainting. Further savings can be made by the reduced need for window blinds, shades or louvers.

PC Glass Blocks will save plenty of money on operating costs, too. As an example, they have high insulating value (equal to an 8-inch masonry wall) so they reduce fuel costs drastically. For more information, mail the coupon at the left.

Pittsburgh Corning Corporation, Dept. AK-45,
One Gateway Center, Pittsburgh 22, Pa.

Please send me the following literature:

- ☐ SKYTROL Glass Blocks for toplighting.
- ☐ PC Glass Blocks for schools and other public buildings.
- ☐ SUNTROL Glass Blocks for glare and heat reduction.
- ☐ Send engineer to discuss specific problem.

Name _____ Title _____

School System _____

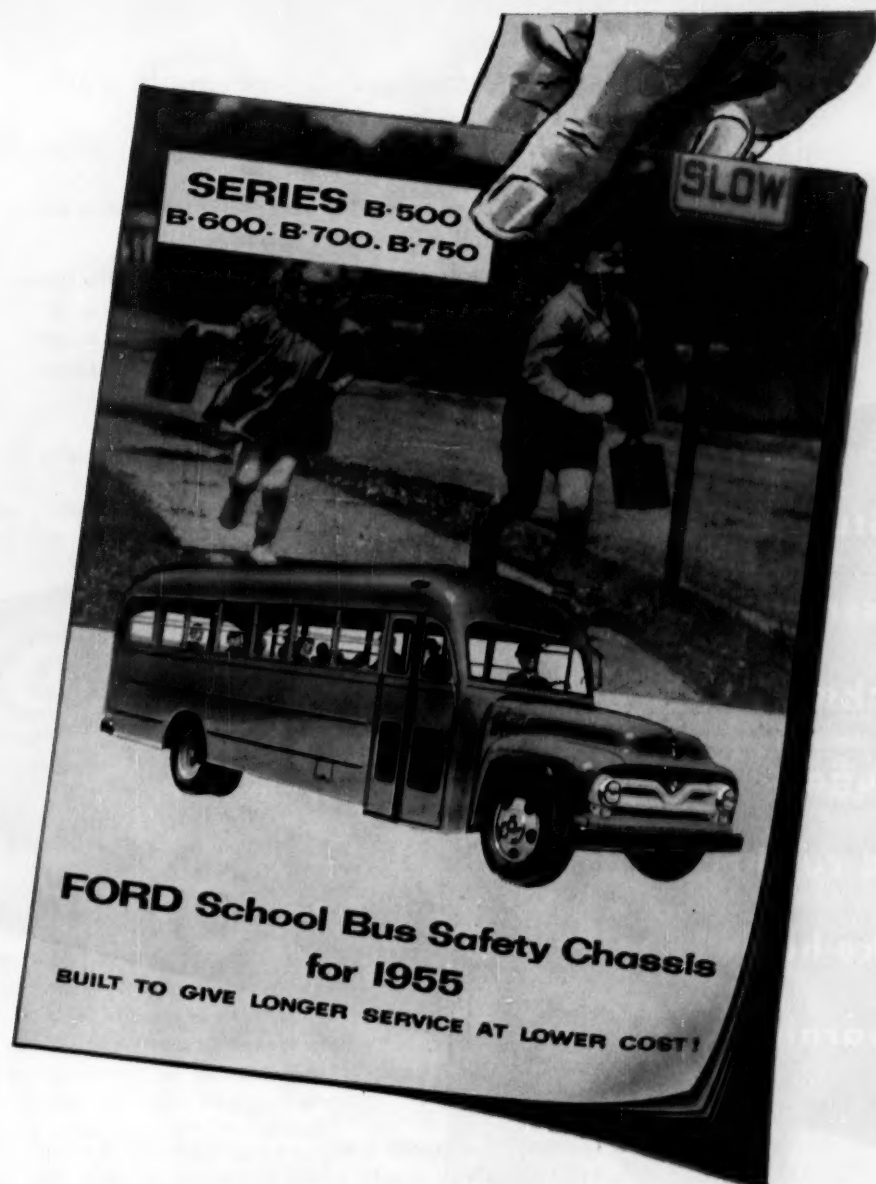
Address _____

City _____ Zone _____ State _____

PC Glass Blocks



ALSO SKYTROL® AND FOAMGLAS®



This 8-page book tells you how to get the most for your school bus dollar

For 1955, Ford offers five Safety Chassis on four wheelbase lengths with capacities ranging up to 61 passengers . . . four Short Stroke engines, V-8 and Six, from 118 to 152 h.p. The 8-page book shown above gives the complete facts on these engines and chassis that will help you choose the school bus tailored to your particular requirements—for greatest economy with safety.

Send coupon for your free copy of this book. Then call your Ford Dealer. He'll be glad to give you any further information you may need and help you in any way possible.

MAIL THIS COUPON TODAY!

FREE

FORD Division of FORD MOTOR CO.
P.O. Box 658, Dearborn, Michigan

Please send me your latest literature on the new Ford School Bus Safety Chassis for '55.

NAME _____

ADDRESS _____

CITY _____

STATE _____

B-2

Check here if student ☐

STUFFY CLASSROOMS make your students dull and sluggish—and naturally cut down "take home" learning.

That's why it's so essential to have proper temperature and ventilation control *at all times!*

Student reactions will vary widely—depending on the time of day, the type of class, and the method of instruction. But the new Honeywell Schoolmaster Temperature Control System assures the proper conditions for classroom alertness throughout the day.

Stuffy
classrooms
make him
sluggish...
and cut his
"take home"
learning



This new Schoolmaster System is a highly productive unit. It includes a newly developed school thermostat for each classroom, plus an indicator panel for the principal's office which gives a finger tip report on all room temperatures.

With this system, you can accurately coordinate level temperatures, proper humidity and ventilation to create ideal conditions for brighter classes, and better learning.

The Schoolmaster is an exclusive Honeywell feature. It's designed for *any* school, whether it's a new or older building. No major building alterations are necessary, as the wiring is simple.

For complete information, call your local Honeywell office, or write to Honeywell, Dept. NS-4-42, Minneapolis 8, Minnesota.

New Honeywell Schoolmaster System makes temperature and ventilation control a "productive" item



A thermostat in each room makes temperature and ventilation control a part of teaching. The Honeywell individual classroom thermostat is custom designed for the instructor so that room temperature and ventilation can be matched to class activities.

An indicator panel gives the principal a finger tip report. The panel shown here is for the principal's office and is wired to a special sensing element in the thermostat for each room. The principal can have a push-button temperature reading for any room in the school.



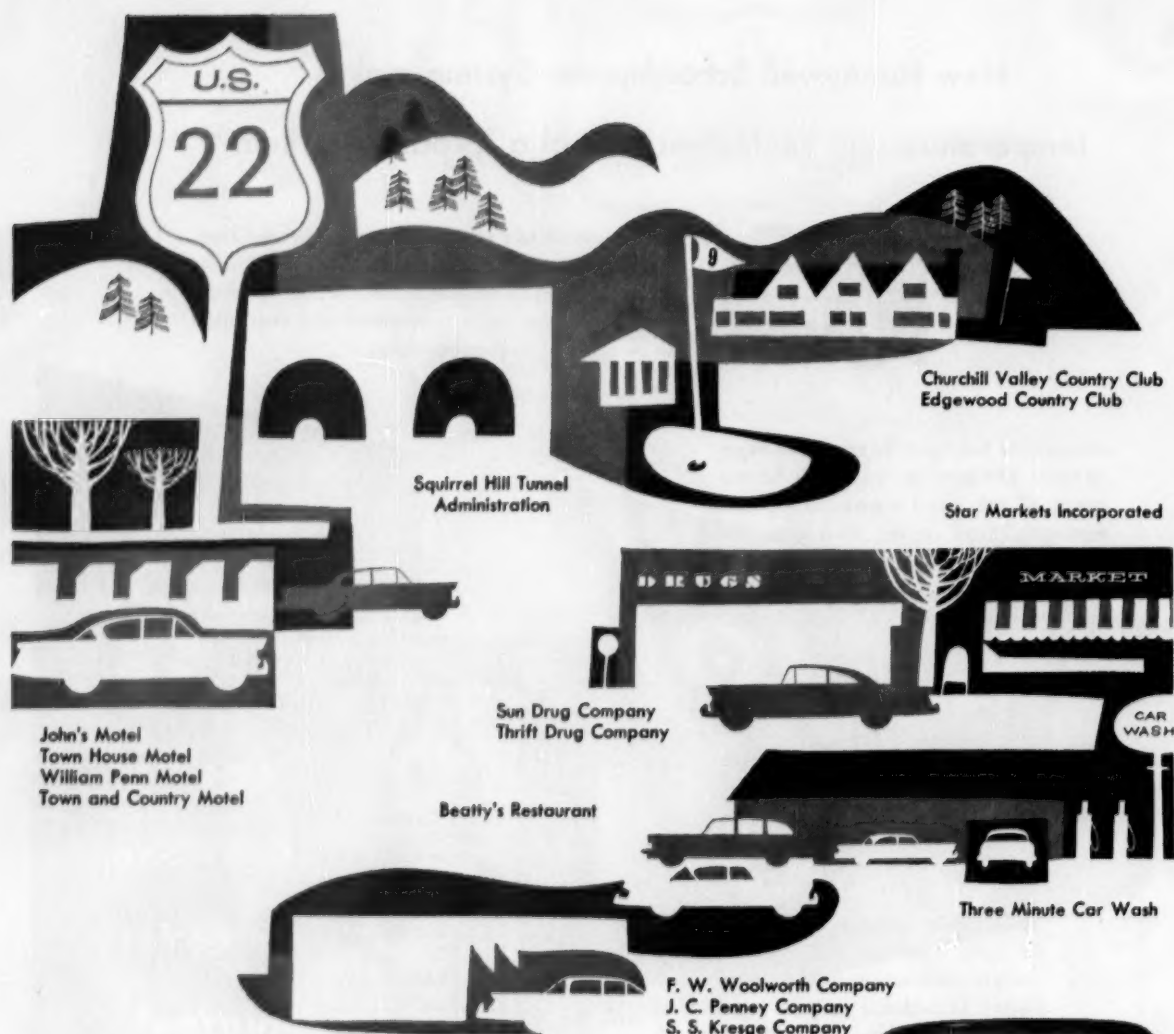
Special sensing elements provide added fire safety. You have a constant fire sentry in the Honeywell Schoolmaster System, in addition to your regular fire protection system. You have fire sensing elements in each room, and in closets and store rooms, if you wish. These elements are wired to the principal's panel to help detect fires.

MINNEAPOLIS Honeywell

School Temperature Controls

112 OFFICES ACROSS THE NATION





Hot Water Pays, All Ways...Thanks to *GAS*

On a short stretch of Route 22 east of Pittsburgh, you'll find fifteen different commercial establishments using Gas-fired Ruud water heaters. In each case, plenty of hot water is needed, whether it's for dishwashing, coffee making and other food preparation uses, or for showers, laundries, car washing or general cleaning. Only Gas gives the vast amount of hot water they need so fast, at so little cost. A Gas water heater of the proper size, backed by the estab-

lished reputation of its manufacturer, gives commercial and institutional operations all the hot water they need for every purpose.

There are complete lines of dependable Gas water heaters including economical, efficient boosters, for every large volume water heating requirement. For specifications, data and literature, call your Gas Company's representative or commercial gas water heater dealer. *American Gas Association.*



The NATION'S SCHOOLS

NOW...

"OVEN FIT"

WEAR-EVER



SANITARY OPEN BEAD
is a Wear-Ever exclusive—means faster, easier cleaning.



STEAM-SEAL CONSTRUCTION
locks food flavors in utensil to assure finest cooking results every time.

SNAP-BACK HANDLES
are kept flush to sides by strong, durable springs. Special design permits ample finger room.

Today's newest development in cooking efficiency

They're here . . . seven amazing new pans designed especially for your modern restaurant range. Pans that for the first time bring you a *flexibility* that lets you cook more foods faster, in less space. Result: fuel saved, time saved, *money* saved.

You can team them up into 14 possible cooking combinations. "Twin" unit pans fit oven side-by-side; have interchangeable tops for covered or open roasting. Four

full-oven pans come in sheet, bake and roast sizes—adapt perfectly to your cooking wants.

Special durable, even-heating alloy

These pans are built to last. Wear-Ever's lightweight, dent-resistant hard wrought alloy assures long life—and superior cooking results. Your whole pan does the cooking in even-heating Wear-Ever aluminum. Hot spots are eliminated.

FREE FOLDER ON REQUEST—SEND TODAY

The Aluminum Cooking Utensil Company, Inc.
3504 Wear-Ever Bldg., New Kensington, Pa.

GENTLEMEN: I'd like to know more about your new "oven-fit" pans.

☐ Send me your catalog. ☐ Have your representative see me.

NAME

TITLE

Fill in, clip to your letterhead and mail today.

NEW ITEM! Wear-Ever's new Nickel Scouring Cloth. Won't scratch, won't mar, far outlasts ordinary scouring cloths. At your dealer's.



WEAR-EVER



Aluminum UTENSILS

THE ALUMINUM COOKING UTENSIL CO., INC.,
WEAR-EVER BLDG., NEW KENSINGTON, PA.

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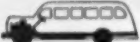
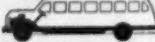
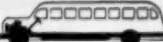
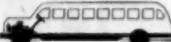
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Static Conductive Linoleum. Surgical Room. Clifton Memorial Hospital, Pompton Plains, New Jersey.

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Combines best features of other tiles! As moisture-resistant
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Vinylbest Tile. Home Economics Class Room, Kearny High School, Kearny, New Jersey.

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Smoother surface finish! Easier to clean and keep clean!

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On the wall: Light Pattern.

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Gold Seal Rubber Tile is today's prestige tile . . . beautiful, comfortable, impressive! The perfect flooring for dramatic custom designs . . . it gives you the greatest resilience as well as the clearest colors in the industry. Luxuriously quiet. Long wearing. 21 marbled patterns. **Specifications:** 6" x 6" and 9" x 9" tiles. $\frac{1}{8}$ " gauge. Also in standard (.080") gauge for homes and light traffic areas. Install over suspended wood or concrete sub-floors and over on-grade concrete . . . with or without radiant heat . . . Use Gold Seal "Three-Twenty" adhesive. Fed. Specs. ZZ-T-301A. Guaranteed.*

Looking Forward

THE
**NATION'S
SCHOOLS**
APRIL 1955

President's School Loan Plan Boomerangs

HERBLOCK aptly cartoons President Eisenhower's loan plan to help schools as a textbook on swimming tossed to a man who is drowning.

Political opponents are referring to the plan as the moneylender's bill. The loan idea is popular with those who say, "Yes, we're for public education as long as the federal government doesn't pay for it. We want its manpower, its resources, and the prosperity it brings, but we don't want to invest in it—as a national government—even though the strength and the moral fiber of this country depend upon an enlightened citizenry."

The loan plan assumes that the great need for school buildings is a non-recurring emergency, and so school districts can borrow now and repay in a more prosperous day. The assumption is so ridiculous as to be absurd. The next decade will see 10 million more children in public schools, adding billions of dollars in costs to school district budgets that already are underfinanced.

Congress can give money to public schools if it wants to, without demanding a pound of flesh. The history of this country offers many precedents of all-out gifts to public education from Congress, dating back to "the endowment magnificent," the 175 million acres of land set aside by the federal government for school support. And the justification for federal-aid-without-strings is greater now than ever before.

But it's not a question of federal *control*. It's a question of federal *intentions*, and more people are doubting the honorable intentions of "friends of education" who hide behind the federal control scarecrow.

Least impressed by the federal loan plan are the chief state school officers. Their comments were read into the record at hearings before the subgroup of the Senate labor and public welfare committee.

The plan is "utterly useless to Montana," said that state's Mary Condon.

"Contrary to Kansas' philosophy," stated Adel Throckmorton.

"Wrong approach entirely," declared Arkansas' A. W. Ford.

Others found the proposal "would even be dan-

gerous"; "complex, cumbersome, full of red tape"; it would "raise serious constitutional questions."

"This bill just doesn't fit education," Edgar Fuller, executive secretary of the National Council of Chief State School Officers, told the senators. "It is written in the tone of a mortgage banker lending money to a pauper to tie him down solidly so as to get the money back plus interest. . . . You couldn't bring people together who knew about *education* and come out with a bill like this." (See Wire From Washington, page 112, for further analysis by Dr. Fuller.)

The attitude of the National Education Association, as expressed in testimony by William G. Carr, executive secretary, is primarily that the Administration's plan gives too little actual aid to schools and keeps too much control for the federal government. He pointed out that states and localities cannot tax the present prosperity, while the federal government can through income tax machinery.

Another serious objection to the Administration plan, which perhaps should be remembered as Senate Bill 968, was pointed out by E. L. Lindman of



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George Peabody College. Dr. Lindman reminded the committee that most states do not have special agencies that could handle school construction. And some states feel that such school building authorities would lead to irresponsible borrowing without constitutional safeguards.

The Administration, he said, should not try to set up a nationwide pattern of state authorities which some states find either objectionable or legally impossible.

Organized labor is united not only on the merger of its own major groups but also in its outspoken disapproval of the Eisenhower plan. In hearings before the Senate subcommittee, the spokesman for the American Federation of Labor denounced the proposal "as a halfhearted, pinch-penny approach to today's school crisis."

Echoing this point of view for the American Federation of Teachers, its representative declared that "school districts need more right now, not merely a heavier mortgage on the future."

And the C.I.O. spokesman denounced the bill as "too little and too late."

All three of the organized labor spokesmen urged support for the bill of Sen. Lister Hill (D-Ala.), which calls for \$1 billion in direct federal grants to states over a two-year period.

The real issue boils down to two questions: (1) Since grants-in-aid to states are now an established federal policy, is public education to be the neglected stepchild? (2) If Congress and the Administration are willing to *give* (not lend) money to the states for public education, will they stop dictating controls and trust the states to spend that money wisely?

Political observers analyze the situation something like this: Pressure for direct aid to schools accumulated so rapidly that the stall in the form of a national conference on education (to consider the needs) was not stemming the tide. In fact, support for direct aid was snowballing so rapidly that the President had to rush his counterproposal to Congress before he was ready.

The bill to implement his proposal was not made in cooperation with educational leaders, nor is it a product of the specialists on the United States Office of Education staff. The ideas for the plan were provided by attorneys and laymen who understand bond issues but not schools or schoolmen.

Since the plan is rejected by education, the Administration now faces the question of strategy:

1. Shall it continue to stall, using the argument advanced by Commissioner S. M. Brownell at the St. Louis meeting of the A.A.S.A.? (The commissioner told the chief state school officers that public opinion generally is not in favor of direct federal aid and that educators—including state superintendents—who are pressuring for it are out of step.)

2. Or shall it kill any bill offering substantial direct grants (not loans) to schools by tacking on a segregation rider? Such an amendment would

deny federal aid to any state in which segregation of school children is in effect.

It may be that the first skirmish in this maneuver was witnessed at the A.A.S.A. regional meeting in St. Louis, where Sen. Clifford P. Case (R-N.J.) not only advocated that federal aid be withheld from states where segregation exists but even proposed other forms of federal control. Appealing to the popular demand for higher salaries for teachers, he suggested that perhaps the federal government should compensate more generously those states that put more money into teachers' salaries.

If such a system of federal rewards and penalties to the states (the prize being more money) isn't federal control, then what is it?

But what a bear trap this segregation strategy could be! Public opinion would say: "Why not be consistent and apply the same principle to your ambitious plan of federal aid for highways? Segregation is practiced in local public transportation, too, when buses traveling on roads (built partly with federal funds) reserve front seats for white folk. Why not apply this restriction to federal aid for land-grant colleges? For vocational education in public schools? For school lunches? For airports? For hospitals?" Segregation of hospital services for the minority group is practiced in many states.

A segregation rider would be a second guess on the next move of the Supreme Court, since that judicial body has agreed on a principle only, and further decisions are still to be made. In the unlikely event that a bill with such a rider could be adopted, it would delay actual aid to states for months, and probably years, because of battles over court decisions yet to be made.

Where do we go from here?

1. We keep alert and tell others about this political battle upon which so much is at stake for public education.

2. We respect the opinion of those who sincerely oppose the policy of federal money's being spent for public education, *but* we insist they recognize that federal money could be *given* to the states for educational purposes *without* control—if the politicians are willing to do so.

3. We remind our congressmen that the welfare of education rises above partisan politics and also tell them that right now it's smart politics to read the handwriting on the wall. Translated, it says: "The people of this country want much more money invested in public education, and they think the federal government has a share in this responsibility. You would be politically wise to take the credit for making these things possible; otherwise your political opponents will do so and be rewarded with public support at the polls."

The Editor

The NATION'S SCHOOLS

**Study of intermediate school
districts in thirty states
shows small systems
get same variety of services
as large districts — when there's
intermediate-level leadership**



Opening scene of Song Festival, Washtenaw County, Michigan. The 3000 children get instruction by radio.

For the county superintendency

New Fields of Opportunity

KENNETH E. MCINTYRE

Associate Professor of Educational Administration
University of Texas, Austin

SOMETHING is happening to the county school superintendency in the United States. Long accepted or tolerated as a necessary component of the common school district type of organization, the office is now being subjected to searching scrutiny and is even being abolished in some places. It is becoming increasingly apparent that the county superintendency must undergo a thorough modernization or go the way of the fringe-topped surry and the mustache cup.

The reasons that the office must put on a new look or face extinction seem obvious enough. As the demands

The term "county school superintendency" is used in this article to refer to the office where it is in an intermediate position, between the local district and the state. It does not refer to the superintendency of a county unit. Most county superintendencies, other than in county units, serve local school districts in a dual capacity: as an administrative office, usually for school districts in the open country organized for elementary school purposes only, and as a service office for independent school districts.

placed upon education have increased, there has been a corresponding decrease in the confidence placed in the antiquated school districts over which county superintendents usually have administrative jurisdiction. As a consequence of the resultant widespread redistricting that has been taking place in an increasing number of states, the county superintendent must justify his position in terms of a different type of service or close up shop.

In most places, the trend is toward the formation of larger independent (or community) school districts either through planned programs which ignore existing lines or through simple mergers or consolidations of existing districts. In some cases, counties have been completely reorganized into one or more independent districts, each with its own superintendent. Most of the reorganized districts are far more efficient and effective than were the component districts

prior to reorganization, but comparatively few are capable of providing anything like a complete program of education and the necessary services. It is in this connection that the people must make an important decision—whether to shoot for school districts that will be large enough (primarily in terms of pupil population) to do a complete job or to organize around natural communities, many of which will be too small to provide the more specialized offerings and services. If the former alternative is chosen, then the county superintendency indeed appears to be obsolete. If the latter is chosen, then an intermediate service unit of some type (not necessarily the county) seems to be essential.

Proceeding on the belief that local community control, initiative and responsibility are too important to be sacrificed to financial "efficiency," I assume that the trend toward organizing local school districts around natural communities will continue.



San Diego County, California, has a school service center through which science teaching is coordinated. Also from this center mobile shop instruction is brought to rural schools. Here first grade children are constructing a trailer, a type of housing many of them are familiar with.

As a result, there is and will be an urgent need for strong intermediate units to provide services for community units, particularly smaller ones.

I recently made a study of outstanding intermediate services in 30 of the 33 states that have that level of organization. I received more than 150 reports of specific practices and programs, illustrating the point that few services can be found in *any* school system that are not now being provided in *small* school systems in certain areas through alert intermediate-level leadership. The few examples cited in the following paragraphs were selected to suggest the almost limitless field in which intermediate superintendents can operate.

Helping With Problems of Administration. One type of service that should be available at the intermediate level pertains to the administration of schools. The typical superintendent of a small independent district needs consultative help in

such matters as financial accounting, budgeting and reporting. This is now provided in Wayne County, Michigan.

In Caldwell County, Texas, a cooperative group approach was used in seeking a solution to the pupil attendance problem caused by a large, shifting population of migratory workers and the employment of children to harvest farm crops. The county superintendent called a meeting of representatives of the department of labor, the Texas Employment Commission, farm operators, laborers and labor contractors. The problems of each group were set forth, and a plan of action was worked out to the satisfaction of all interested groups. In addition, a visiting teacher was employed to serve the county's five school districts, four of which are independent districts. Attendance has improved markedly.

Many county superintendents offer valuable services to district boards of education, particularly in such areas as the development of policies, the

organization of discussion groups, workshops and study committees, and the preparation of written materials.

Taking the Lead in Sound Reorganization of Districts. In the reorganization of school districts, the county superintendent is in a key position to play a leading rôle in the development of sound district structure. Examples can be cited in states throughout the country attesting to the progress that can be made under capable county-level leadership.

The operation of efficient pupil transportation systems is oftener than not a job that can best be done above the local district level. The purchase of supplies and equipment, the operation of a central maintenance shop, the employment and supervision of personnel, the determination of routes, and the keeping of records are services that could well be performed by the county superintendent and his staff. Bowie County, Texas, has such a system, and it is widely praised.

Many county superintendents also head up cooperative purchasing programs that result in significant savings to small school districts that cannot buy in sufficient volume to get substantial discounts. Savings ranging from 25.0 to 43.5 per cent on catalog prices have been reported.

Meeting Special Curriculum Needs. Probably the most frequently mentioned shortcoming of small school systems is their inability to meet the needs of students in the more specialized curricular areas. Quite often the solution to the problem can be found in cooperative arrangements with other small districts.

It is common practice for itinerant teachers of such subjects as art and music to be shared by two or more small school systems, under arrangements worked out through the county superintendent. Equally common is the sharing of audio-visual aids and curriculum materials. The curriculum materials center maintained in Bucks County, Pennsylvania, is illustrative of the type of service that can be provided at the county level. In Bucks County the small schools have access to an impressive range and variety of materials and equipment—projectors, recordings, mounted photographs, museum exhibits, films and filmstrips, slides, paintings, professional books and periodicals, school administration portfolios, and many other aids.

Camping is usually considered to be a type of activity that one small school system would have difficulty in providing, but there are many excellent camping programs sponsored jointly by several small systems, as is the one in Snohomish County, Washington. Clark County, Indiana, provides a summer camp for crippled children, and Wayne County, Michigan, has experimented with a summer camp for maladjusted youngsters.

Where special technical equipment and trained personnel are not available in classrooms locally, the classrooms can be moved in, complete with equipment and personnel. San Diego County, California, provides mobile industrial arts shops for small schools, and Kern County, California, has mobile home economics units and commercial classrooms.

Children in the rural schools of Washtenaw County, Michigan, receive music instruction, by way of radio, from the University of Michigan, with special song books and manuals that are supplied to each school. Educational television also offers a rich opportunity for intermediate-level leadership to bring the benefits of this medium to the children in the small towns and rural areas of the nation. Ten counties in the San Francisco bay area formed the Bay Area Educational Television As-



Above: Several small school systems unite in sponsoring a camping program in Snohomish County, Washington. Young campers here are gold panning in a snow-fed stream near their camp site. Below: San Diego County mobile unit brings training in crafts and vocational skills.



sociation, which broadcasts regularly on its own channel.

Coordination of learning experiences in the field of science is one of the curricular services provided for the schools in San Diego County, California. Focus of the program is the science laboratory at the county schools service center. Organized after a lengthy study of science rooms in schools and curriculum centers, the science laboratory is designed specifically to meet the needs of children.

Almost all of the laboratory equipment, which consists of a complete array of materials needed for effective science instruction, was constructed from simple materials easily available to teachers and pupils in the schools. With guidance from the science coordinator, teachers learn to build this equipment during workshop sessions. On field trips they collect the living plants and animals and the insect and mineral specimens which form the laboratory exhibits.

In the science laboratory teachers also observe demonstrations by experts, conduct experiments, and exchange ideas and information. The coordinator also assists in arranging field trips and in bringing other county services, such as audio-visual aids and mobile shops, to bear on problems in science education.

Providing Special Services for Pupils. In Dallas County, Texas, the pupils in small systems receive complete preschool medical examinations, provided cooperatively by the county superintendent's office, the county health department, the state health department, and local parent-teacher associations. The services of nurses, nutritionists, dentists, physicians and medical-social consultants are all utilized.

The second supervisory district of Suffolk County, New York, provides a team of psychologists, a social worker, and a psychiatrist to help children whose school performance suffers because of emotional problems. A school is also operated in a local hospital for children afflicted with cerebral palsy.

In Walworth County, Wisconsin, a school is operated for mentally handicapped children from districts throughout the county.

Much of the technical work connected with testing can be done by specialists working out of the county superintendent's office. Orange County,

California, offers a testing service extending from kindergarten through junior college. On request, the county office administers tests (while training teachers to assume this responsibility), scores the tests by machine, and reports the results back to the school. County norms are published annually. The testing and counseling service is designed to effect a smooth transition for students passing from one school or district to another.

The first supervisory district of Westchester County, New York, maintains a guidance center to which groups of students are brought for special testing and counseling. The major purpose of the center is to supplement the work of local school counselors through the provision of services requiring highly specialized personnel and equipment. Ten school systems participate in the program.

Assisting in Personnel Management. For several years the superintendent's office in Alameda County, California, has given assistance to local district superintendents in their efforts to obtain competent teachers, applications clearing through it.

Countywide cooperative salary scheduling has been developed by the county superintendents in Polk and Milwaukee counties in Wisconsin.

Leading county superintendents throughout the country are doing

excellent work in providing inservice education programs for school board members, administrators, teachers and nonteaching personnel. This is accomplished through the organization of extension center courses, workshops, institutes and study centers; through the development of professional libraries; through setting up programs for the orientation of new personnel; through the preparation of teaching materials and resource units; through arranging for intervisitation, and through many other devices.

Doing Research, Improving Interschool Communications. Small school districts are often in need of help in carrying out research and in communicating with the lay public and professional persons in other systems.

Illustrative of the possibilities for county-level leadership in research is a unique program known as the Contra Costa Cooperative Study, which has been developed in Contra Costa County, California. A "grass roots" research program, the cooperative study is a joint undertaking involving committees of professional people from education, public health, library service, and other fields. A citizens advisory council assists the committees. The cooperative study identifies current practices, weighs their validity, and makes certain recommendations.

Curriculum materials center in Bucks County, Pennsylvania, sponsors one-man art shows. A tape recording is made of an interview with the artist and is replayed for visitors, who are chiefly school children.





Professional Growth Day for teachers in San Diego County doesn't necessarily mean coming into town. Here teachers are making rhythm instruments at their own school; a mobile shop consultant is instructor.

In the field of communications, opportunities at the intermediate level are myriad, and some of the current practices are outstanding.

Excellent directories, containing useful information about schools and personnel throughout the county, are issued by many county superintendents. Some county offices publish written and pictorial reports, designed to acquaint the public with the objectives and programs of education in the county. In other counties, professional journals, handbooks and newsletters are published for the purpose of disseminating information and reports of good practices to teachers and other school personnel.

As long as we have school districts that are organized so as to make education responsive to the thinking of people on the local community level, we shall have a need for service provided above that level. The nature of the services required in any particular locality will vary according to the capacity of the local district to satisfy its own needs—certainly there should be no tendency for an intermediate unit to usurp the functions that local districts can perform adequately.

Strong Intermediate Units a Safeguard of Local Control. The menace to local control of education does not lie in the formation of strong, healthy intermediate units;

quite the contrary! The best safeguard for really effective local control would appear to be the organization of sound community districts, with equally sound intermediate units to supply the services that cannot be provided locally. Otherwise, in justice to the school children in small communities the only alternative is to enlarge school districts to the point of self-sufficiency.

HAVE CAKE, EAT IT TOO

The intermediate unit that is staffed with highly competent leadership and supported with adequate funds can provide a way for people in our smaller communities to have their cake and eat it too. It will permit the existence of justifiably small community school districts at the same time that it provides services usually found only in more populous systems. The practices now being carried on by pioneering county superintendents point the way to the type of leadership that will be needed if the intermediate level of organization is to fulfill the rôle that is cut out for it. Perhaps the county will not in most instances be the most satisfactory unit of intermediate organization, but one thing is certain: The county superintendents throughout the country now have a challenge and an opportunity that are almost unparalleled in the entire history of American education. As for all the rest of us, we cannot

sit by and leave it up to the county superintendents to prove their worth or get off the payroll. We have children to educate, and the primary responsibility for getting the job done, completely and effectively, rests with us in the local school districts—not with the county superintendents.

If the people in the smaller community school districts can find a way to provide a complete program of education and the essential services without the aid of an intermediate unit, then more power to them. If we want the state department of education to provide such a program, then let us head in that direction. If we want neither the state nor intermediate units in the picture, then we must set our redistricting sights on much bigger game than we have in the past in most places.

If, however, we want to make the secondary community the basic unit of organization, then it is time that we realistically face the fact that most such communities will need help. And if that help is to come from the county or some other intermediate unit of organization, the functions to be exercised at that level must be well planned and the office must be adequately supported.

AS SIMPLE AS THAT

Unfortunately, few states provide a climate in which the office of the intermediate superintendent can reasonably be expected to render the scope and quality of service to which community school districts are entitled. It is significant that many of the most outstanding programs of service can be found in those few states in which intermediate-level service is recognized by law to be an important element in the state's educational system and is supported accordingly. The fact that there are many fine programs even in states in which the office must operate under great handicaps is indicative of superior leadership at work in those places.

The future of the intermediate superintendency will ultimately be determined by our decisions with regard to basic district organization and by the ability of today's county superintendents to make their offices, however inadequately staffed and financed at present, so indispensable that there will be no question of their abolition. It is just as simple, and as complex, as that.

**Georgia, Pennsylvania, Maine
and Indiana answer the question:**

Can State Building Agencies Solve the Classroom Shortage?

Georgia Schoolmen and Citizens Favor Plan

M. D. COLLINS

State Superintendent of Schools

THE state school building authority in Georgia was created by an act of the state legislature at its 1951 session in response to the critical need for an agency through which school systems of the state could capitalize annual allotments of state funds for capital outlay in order to obtain a large number of school buildings within a relatively short time. The minimum foundation law for education in Georgia, which was implemented by the 1951 legislature, provided, for the first time, annual allotments of state funds to school systems for school building construction.

NO STATE BOND ISSUES

The need for a state school building authority grew out of the fact that, under the constitution of Georgia, the state is not permitted to issue state bonds for any purpose. This fact, coupled with the fact that allotments of state funds, taken on an annual basis, could not meet already existing needs in the foreseeable future, made it necessary for us to establish a financing and construction agency.

First applications for capital outlay funds were approved by the state board of education in the spring of 1952, and since that time allotments of state funds have been set up for all of the school systems of the state. These allotments are based on needs as shown in the application from each school system.

Of the 202 school systems of the state, 190 have elected to use the state school building authority. In the re-

maining 12 systems, needs were limited to the extent that they could be met by use of the annual allotment of state funds.

The following step-by-step procedure was followed by each school system in the development of its building program:

1. A school plant survey was conducted by local study groups with consultative help from the state department of education and the colleges and universities of the state.

2. A survey reviewing committee composed of competent professional men and women was invited by the system board of education to study the reports of the local survey group and make recommendations as to a long-range building program.

3. The system board of education adopted a long-range program setting up permanent school centers to which children were assigned on a basis of the average daily attendance for the 1951-52 school year.

4. On the basis of the program approved by the system board of education, a statement of allowable space, based on standards approved by the state board of education, was issued by the state department of education.

5. With this statement of allowable space used as a base, the application for capital outlay funds was presented to the state board of education. These applications listed building needs in order of priority.

6. Following approval of the application by the state board of education, the annual allotment of state funds for 20 years was set up.

7. Upon the request of the system board of education, the application was certified to the state school building authority by the state department of education.

8. The state school building authority issued a commitment to the system

board of education providing for the construction of as many of the improvements proposed in the application as state allotted funds would finance.

9. Upon the acceptance of the commitment from the state school building authority by the system board of education and assignment of state allotted funds to the authority, bonds were sold by the authority with which to finance the construction program for the system.

10. When this commitment from the state school building authority was issued to the system board of education, plans for the improvements covered by the commitment were scheduled for review in the state department of education. Plans were reviewed in three stages: preliminary plans, large scale drawings of special areas (such as science rooms, home-making rooms, libraries, shops, kitchens), and final working drawings. Plans were prepared by private architects employed by the system board of education.

11. Upon approval of plans by the state department of education, bids were asked and contracts were let by the state school building authority.

LEASE-PURCHASE AGREEMENT

Supervision of construction for the projects financed by the state school building authority is handled by the architect who designs a building and a resident engineer employed by the authority. Upon completion of the building, it is turned over to the system board of education for use.

The contract between the system board of education and the state school building authority is in the form of a lease-purchase agreement under which the building becomes the property of the school system at the end of the lease-purchase period. Insur-

President Eisenhower's plan to lend federal funds for schoolhouse construction raises the question: How successfully have state building authorities operated to date? Here are answers from four states where privately financed properties are rented to school districts and from Kentucky, where fiscal courts can build schools.

ance and major maintenance costs are carried by the state school building authority from reserve funds provided for these items. Day-to-day maintenance is the responsibility of the system board of education.

WILL ADD 12,000 CLASSROOMS

By the end of the 1956-57 school year, the state school building authority in Georgia will have completed more than a thousand improvements (new buildings or additions to existing buildings), containing more than 12,000 new classrooms. All construction is fire resistant, and facilities are modern in every respect.

The key to the success of this authority type of financing lies in the availability of funds which a school system may capitalize through the authority. In those instances where state bonds can be issued, there seems to be no need for an authority such as the state school building authority in Georgia.

In order to complete its building program, it is necessary for a school system to use half of its local bonding ability. There is no requirement that local funds must be used as a prerequisite to allotment of state funds.

The great advantage of the Georgia program lies in the fact that, despite the limitations on state bonding, it has been possible to obtain a large number of desperately needed school buildings in a relatively short time. The interest rates have not been excessive (an average of 3.1 per cent on the first \$137 million worth of bonds), and the quality of construction is good. A third advantage recognized by the people of the state is the fact that the program for a system is kept in the hands of school people at the local and state levels until bids are actually taken by the state school building authority.

Prevailing opinions concerning the authority are favorable. School people and laymen recognize that, without such a financing and construction agency, Georgia could not have hoped to begin to meet school building needs. It has been recognized that the Georgia authority was created to meet conditions peculiar to Georgia and that other states may find other plans more advantageous.

While progress of a program under the Georgia plan is somewhat slow, because of the necessity for coupling local control with joint activity of the state department of education and the state school building authority, school people and laymen have been uniformly pleased with the buildings turned over to them for their schools. The authority is presently negotiating a fourth sale of bonds which will provide for improvements in 40 school systems for which plans had not previously been made.

Pennsylvania Law Brings Great Spurt in Construction

JOHN J. HERTZ

*Director of School Administration
State Department of Public Instruction*

PENNSYLVANIA has been using the building authority plan for financing school construction since 1947. Most of such construction has taken place since 1951. Under the program, Pennsylvania currently has 762 projects under way, costing about \$474 million.

Nonprofit corporation financing in Pennsylvania traces back to Troy Borough in Bradford County where it was first used about 1914, without benefit of legal sanction. Other districts, perhaps as many as twenty-five, used the plan in later years, but no

legal sanction was given to it until 1941 when, largely at the behest of Bellefonte Borough in Centre County, permissive legislation for such financing was passed. A similar device is the authority method of financing first adopted by the commonwealth by the act of Dec. 27, 1933. This law empowered second-class counties to create authorities to construct highway projects, borrow from the federal government, and repay the loans through collection of tolls. In 1935 the legislature created the General State Authority and conferred upon it power to construct public works and lease them to the state or its agencies. Ten years later the legislature repealed the act of 1935 and enacted the Municipality Authorities Act of 1945, which permitted municipalities, other than school districts, to form authorities for various purposes, including the construction of school buildings. In 1947 the state public school building authority was created and empowered to construct school buildings and lease them to school districts.

Construction of much needed school buildings by the state public school building authority was delayed for many months pending solution of certain legal problems.

The basic legal question was whether a long-term lease between the authority and a school district for the payment of an annual rental constituted a debt. If the rental payments to which the district was committed were in excess of its total debt limitation, would the district's agreement to assume an obligation to pay such rentals be unconstitutional and would the payments be illegal? The court held that the leases in controversy will be "straight" leases to the school district and that at the end of the lease period the title and ownership of the project and the land on which it is located will be in the authority. To avoid the pitfalls of unconstitutionality and illegality, leases between a school district and an authority do not provide for the return of title to the property to the school district when the cost of the project has been fully amortized for the reason, according to the courts of Pennsylvania, that to do so would amount to a purchase by installments, and, if the amount of the purchase were in excess of the school district's debt limitation, the purchase would be illegal.

Some people look upon this procedure as an evasion of the constitu-

tional limitation on the powers of a political subdivision to incur debt. Perhaps it is, but, if it is, it is a legal evasion. The supreme court of Pennsylvania in 1937 held that, although the plans might be termed an evasion of the constitution, "it is never an illegal evasion to accomplish a desired result, lawful in itself, by discovering a legal way to do it."

Resolution of the legal problems affecting the State Public School Building Authority Act of 1947 delayed the state authority in issuing bonds and in entering into any leases with school districts for the construction of much needed building facilities for almost two years. Probably through a lack of understanding of the problems involved, school people in Pennsylvania blamed the delay in getting school construction under way on the state authority and demanded some other solution to their pressing problems. As a consequence, the general assembly of 1951 went one step farther and authorized school districts to create their own authorities. The proper tool for financing school buildings was finally provided because the need for it had reached the point of extreme urgency.

SUBSIDIES ARE LIBERALIZED

Since many school districts were unable to raise the funds with which to pay the annual rental to an authority, the next logical step was to provide state assistance for this purpose. The step was taken by the general assembly of 1949 in the passage of Act 557, which provided for the payment of subsidies on account of rentals paid by school districts to the state public school building authority. The amount of these subsidies was insufficient to permit many districts of limited taxing ability to provide the funds necessary to finance a building through the state authority. There was, therefore, a demand for a liberalization of subsidy payments on this account. In addition, there was an urgent demand for the payment of subsidies on account of rentals paid to municipality authorities, which hitherto had not been subsidized. As a result, the 1951 general assembly enacted legislation providing for the payment of reimbursement on account of rentals paid to municipality authorities and for the liberalization of subsidies payable on account of all such rentals whether paid to the state public school building authority or to a municipality authority.

Under this law, all school building projects to be constructed by an authority must first be approved by the department of public instruction. The department of public instruction may give its approval to a project if it finds that (1) the project is in conformance with general county and state plans for orderly development of improved attendance areas and administrative units and for improved school housing in the commonwealth, (2) the building will conform with standards and regulations prescribed by the department with respect to educational design, location, usefulness for community activities, safety, comfort and convenience, and (3) the school district or districts to which the building is to be leased will be able to meet from current revenues the rental to be paid to the municipality authority or nonprofit corporation and to defray the cost of operation and maintenance.

State aid for school construction is paid in the form of subsidies on the annual rentals paid by the school district to an authority. The amount of such aid is determined by the district's need therefor and may vary from nothing in the very wealthy districts to a theoretical 100 per cent in the very poor districts. In actuality, no district is subsidized to the full extent of its annual rental, although some districts receive reimbursements in excess of 90 per cent. The state average is about 50 per cent.

School districts of Pennsylvania, spurred to action by a backlog of building needs from 25 to 30 years in the making and at last in possession of the tools necessary to make that action effective, began in earnest to construct school buildings.

PUTS CEILING ON CONSTRUCTION

By 1953 school building activity had reached such proportions that the general assembly felt impelled to place a ceiling on the amount of authority-financed school construction on which state subsidies would be paid. The ceiling, fixed at \$425 million, was reached in October 1953.

Since 1948 more than 1200 applications for projects have been processed by the department of public instruction. As of Feb. 16, 1955, a total of 721 projects has been placed under contract. The gross cost of these projects is well over \$396 million. An additional 49 projects with a gross cost of almost \$55 million are approved

for reimbursement but are not yet under contract. In recent months, because the statutory limit has been reached, 41 projects totaling \$22.6 million have been approved for construction with the specific understanding that there shall be no reimbursement on account of the rentals neces-

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Maine Authority Finances Half of School Construction

HERBERT G. ESPY

State Commissioner of Education

SINCE it was established in 1951 the Maine School Building Authority has financed 41 buildings, about half the schools built in the state since that time. In most instances these projects have called for \$100,000 or less of school building authority money.

Interest rates have fluctuated somewhat with the market for revenue bonds. For the majority of the schools using 20 year bonds the interest has been less than 3 per cent. In the case of the 25 year bonds the rates have been rather evenly distributed—from 2½ to 3¼ per cent.

At present the activities of the school building authority have been interrupted because of a change in the state constitution by which the S.B.A.'s exemption from the constitutional debt restriction was inadvertently eliminated. This change has no effect upon prior building projects and the bonds issued for them.

Maine law establishes the school building authority as a public instrumentality of the state. There are seven members: four appointed by the governor, to include one member of the state board of education, and three persons representing the state at large—one appointed by the president of the state senate, and, ex officio, the governor and the commissioner of education. The last named serves as chairman.

The statute gives the authority broad and flexible powers. It can construct, own or improve any structures useful for schools, and the land, furniture and equipment for them. It can issue revenue bonds for any of its purposes. The bonds are repayable solely from the rentals and revenues pledged for their payment. It can secure its bond issues by trust

agreement with any trust company. The amount of such bonds outstanding at any one time may not exceed \$25 million. It can make temporary loans to finance school projects. It can fix and collect rentals and other charges for the use of school buildings. It can by eminent domain obtain as much as 25 acres of land for any one project.

Too, the S.B.A. can utilize the services of other state agencies and departments. It can accept from the federal government or any other source loans or grants for school construction. It can contract with towns to design and construct any school project and to acquire land for it. It can advance preliminary expenses to cover such items as architectural services.

In order to provide for general expense for the routine work, the legislature appropriates a moderate administrative fund. To cover necessary incidental expenses for local projects, the authority issues enough bonds.

Members of the authority believe that there are economies and other advantages in delegating to local officials ample discretion and initiative. Accordingly, in some small communities satisfactory buildings have been constructed without the supervisory services of architects or contractors. In such instances much valuable service is donated by members of the community. Consequent building costs are remarkably low.

The authority also encourages communities to accumulate their own reserves in anticipation of needed construction. In some instances, also, philanthropic individuals and public spirited industries have made substantial contributions toward school construction. In such cases the authority is happy to adjust its financing to supplement whatever is available.

It is important to note that the authority not merely provides revenue bonds for the amortization of construction costs but also advances funds to cover preliminary activities and to get construction started. Assistance in amortization alone would be of little value to a community that has no money of its own to begin the work.

The sequence of steps usually followed calls, first, for interested school officials in the local community to apply for approval of the project. Their application indicates the purposes and general specifications of the proposed structure and estimated cost. The application is then reviewed

by the state board of education, which must approve the application for its educational merit before it can be acted upon by the building authority.

The school building authority then carefully studies the practical and financial aspects of the proposed project. It makes all possible effort to approve applications, provided an approval is sound from the point of view both of the applicant town, which will have to meet the principal and interest of bonds issued in its behalf, and of potential purchasers of the bonds. In a good many instances the authority has found it necessary to ask communities to reduce the scope or the quality of their projects in order to bring estimated costs into line with the community's resources.

Once the project has been approved by the authority a formal lease agreement is prepared so that it may be submitted to the voters of the town. When the voters have approved the lease agreement and when all particulars have been carefully examined and approved by the authority's attorneys, including its bond counsel, the authority by resolution authorizes its agents to issue the necessary revenue bonds. Immediately upon the issuance of the bonds, applicants are instructed to proceed with the construction of the buildings. These buildings are legally owned by the authority until the bonds issued for them are paid. For all purposes of ordinary use, however, the

firm as a consultant and agent for the issuance of its revenue bonds. It has contracted with one of the state's well established banks to serve as its trustee and custodian of all funds. It has designated a single insurance broker to handle the placement of its insurance and to make careful on-the-site studies and inspections of the authority's insurance problems. It has retained as its bond counsel an outstanding law firm in this field.

Members of the authority have been much pleased with the excellent results of these arrangements. Indeed, it is the opinion of individuals who have been closely connected with the work of the authority that these arrangements for specialized service have been essential to success.

Although the authority is probably still too new to warrant any final judgment, it is not difficult to cite points for and against it.

The most frequent criticisms have come from representatives of insurance companies. Some have criticized the authority because it depends upon a single insurance broker. Even though the broker pays substantial shares of insurance commissions to local agents designated by local officials, many insurance agents have urged the authority to make other arrangements. (The authority has always considered their proposals and has given much study to the problem. Up to the present time it has not found any other method that would appear to meet all its needs.)

Perhaps the most serious shortcoming is that, under its present statutory powers and without any funds of its own for the purpose, the authority has no way of helping some communities to build school buildings they urgently need. The plain fact is that a few of Maine's smaller communities do not have the financial resources to warrant the issuance of bonds on their account. In a larger number of communities resources have not been sufficient to enable the authority to raise more than a portion of the funds that could have been well used. In most of these instances the authority has been much impressed by the prudence and the character of the people who were seeking funds to build schools.

Another possible criticism is not so much a criticism of the authority as of the general principle of raising funds for small rural communities by means of revenue bonds issued on the general market. In spite of the fact

Lee O. Garber in his school law article this month discusses the constitutionality of state school building authorities (p. 89). Wendell P. Butler describes Kentucky's statutes providing for school building construction (p. 94), and Edgar Fuller in Wire From Washington comments on the Eisenhower plan (p. 112).

buildings are under the control of the local school authorities.

It has been the policy of the school building authority to operate with strict economy. Partly on that account and partly in order to have the help of experienced specialists, the authority has utilized a member of the staff of the attorney general's office. It has from the beginning depended upon a long established Maine investment

that the members of the authority and all of the assisting specialists have tried to be exceedingly flexible, cooperative and helpful to towns attempting to qualify, it is a fact that the very necessary legal and technical requirements for the issuance of revenue bonds are somewhat outside the experience of many small rural communities. Consequently, there have been many delays to correct details of procedure. Almost everyone connected with one of these projects has experienced inconvenience, which was at least time consuming, if not indeed quite troublesome.

Over against these limitations stands the solid fact that teachers and pupils in many Maine communities are today enjoying the use of school buildings they would not have had otherwise. A few of these buildings are very modest and only barely adequate. Many of them are remarkably useful and attractive. Every one of them is a substantial improvement.

If I may be permitted a subjective judgment, I would express the opinion that the people who first developed and initiated the policies for the school building authority deserve much praise for their belief that their first obligation was to give Maine communities all possible help in building school buildings; for their recognition of the need to open the way for local community initiative to show itself in the form of generosity, thrift and industry; for their good sense in seeking to utilize the best specialized assistance to be found either inside or outside their state, and for their own cheerful readiness to give themselves to the task.

Indiana School Corporation Controls Planning of Building

ALVIN ELBRECHT

*Administrative Assistant to
Executive Secretary, I.S.T.A.*

TO PROVIDE a method of financing schools when a bond issue or a cumulative building fund would not produce enough money to meet the needs of the community, Indiana's legislature passed a nonprofit school building corporation law in 1947. This law has been amended several times to make it more workable.

These school building corporations are private organizations at the local community level to buy the building

site, sell stock and bonds, construct the school building, and lease it to the school district. The school district can renew the option or can buy the school building from the school building corporation by providing for such right in the lease contract. Before a school corporation can use this method it must prove a need and also prove that it cannot provide funds in any other way. The law also provides that the lessor must submit plans to the lessee, and in this way the school corporation has control over the planning of the school building. The school corporation may also agree to pay the insurance and to pay for the upkeep of the building. When the buildings have been paid for through rental payments, the titles revert to the school units.

Approximately 61 school units in the state have availed themselves of the school building corporation method in building new classrooms. The bonds from the school building corporation are sold on the open bond market, and the interest rates have been running about 1 per cent higher than the rates on general-obligation bonds. In general, the construction costs have been up to about 10 per cent of the assessed valuation of the school unit. The law does not place a limitation upon the cost range, but it has been found that the bonds do not sell well if the issue is for more than 10 per cent of the assessed valuation.

VALIDITY OF LAW BEING TESTED

When a school corporation has tried to use the nonprofit school building corporation means of building a new school, and it fails to sell its bonds on the open market, a 1953 law permits the state to use funds from the Indiana Common School Fund to purchase the bonds of the school building corporation. This method of financing schools has been used in only two cases to date.

In 1951 the state legislature created a state school building authority with power to construct and finance school buildings by the issuance and sale of bonds for school districts that could not meet their classroom needs. This method has not been used to date because the constitutionality of the law has not been established.

Most school corporations that have used the school building corporation law at the local level find that it is quite involved in details. It has in-

volved some communities in test cases before the supreme court to test the validity of their school corporation.

The use of the law has as a compensation a unifying effect upon the community since it involves many more people in its organization than the school trustees or board.

We still have some communities in which the assessed valuation is not sufficient to enable the community to sell enough bonds to build a school adequate to its needs.

How Holding Company Operates in Indiana Suburb

F. A. VAN SLYKE

Superintendent, Griffith, Ind.

THE idea of forming a holding company to construct school buildings originated in Kentucky 30 years ago. Some years later Indiana passed a law permitting a school corporation to form a holding company as a device for the construction of school buildings. This law was held unconstitutional by the courts. In 1947 another law was passed to permit schools to use a holding company for schoolhouse construction. This law has been challenged in the courts and declared to be constitutional by Indiana's supreme court.

According to the Indiana constitution, a school district cannot bond itself for more than 2 per cent of its assessed valuation. The holding company now provides a means of circumventing the 2 per cent bonding limitation.

Griffith, Ind., is a young and growing suburban town in the metropolitan community known as the Calumet Area. Houses seem to spring up overnight. Our population has more than doubled in the last 12 years; today it is approximately 6000.

The big problem facing the school corporation has been to provide adequate school facilities for our continuously increasing enrollment.

Our assessed valuation is just a little more than \$6 million. Therefore, 2 per cent of the assessed valuation would raise only \$120,000, the cost of four classrooms. Consequently, other ways of financing a high school had to be explored. The only other way available was to form a holding corporation.

The holding company law stipulates the following characteristics: A school
(Continued on Page 92)

SELECTION of the right site for the new school requires the consideration of much more than the mere dollars-and-cents cost of the land. A school is a community headquarters for youths, and increasingly it is becoming a meeting place and cultural center for adults as well. Thus, the school is an institution that, in the modern era, belongs to the entire community.

As the new educational plant probably will serve the area for several generations—you can figure on from 75 to 100 years—it is a long-term investment for the taxpayers. The campus, therefore, must be selected with even more care than an intelligent citizen would give to the choosing of his own homesite.

In Los Angeles an enrollment jump of from 25,000 to 30,000 pupils each year since World War II has forced us to construct the equivalent (in classrooms) of a new school for 500 pupils every Monday morning throughout the school year.

We've purchased land for more than 100 new elementary schools, 20 junior highs, seven high schools, and five junior colleges. These sites are composed of from 1 to 125 separate land parcels and ownerships.

In addition, we have bought land for additions to scores of existing schools and negotiated the acquisition or elimination of hundreds of easements for various purposes. Also, scores of streets and alleys have been vacated through the cooperation of the city and county in order that school properties separated by such streets and alleys may be consolidated.

From this and prior experience our realty staff has learned some valuable pointers and has formulated some definite rules about buying school sites. Most of our "do's" and "don't's" would apply whether a school board was purchasing a single site in a smaller community or buying a number of sites in a city with a fast-growing population.

Some of the problems and our answers are outlined in the following questions, answers and explanations:

What is the first step in locating a new school site?

Make a study of present pupil population, calculate future population trends, and chart the location of existing schools, major highways, rivers, drainage channels, airports, freeways and natural boundaries—all

factors influencing the determination of the school area to be served.

We try to find available land (several likely sites) in the center of the district to be served and in proper relationship to surrounding schools.

On a large land map we spot present schools, using different colors for elementary, junior high and high schools. This helps us visually to maintain the desired relationship between the needs of pupils and available schools at various levels. It is best, both from an educational and a practical point of view, not to put an elementary school too close to a junior high or a high school. One result of failure to separate schools properly is the creation of traffic snarls and undue strain on public transportation facilities.

Rivers, major highways, drainage channels, and freeways must be studied carefully when new school sites are considered, for they may turn out to be barriers to a convenient approach from one or more directions.

With the recent vast freeway construction in southern California, we have found it necessary to work closely with the state division of highways to ascertain the future location of these superhighways and their underpasses. State officials often take into consideration our requests when they are building freeway underpasses

or overpasses so as not to cut off a school from some of its pupils.

What are some of the hazards to look for or to guard against in considering a school site?

Location of flood control channels, natural drainage patterns, high tension wires, highways, airport runways, and landing patterns should be investigated when sites are considered.

Our department keeps in continual touch with district flood control and city engineers. Before buying any school land we study their maps and other data showing water drainage and flood hazards. It is an expensive project to change natural drainage patterns artificially to protect a school from the dangerous water flow that may follow heavy rains. It is much more practical to locate the new school in a place free of such hazards and of industrial noises and fumes.

Recently, we were forced to change the drainage pattern at one elementary school now under construction in a mountainous area of our district. The school is being built in a canyon with the street fronting the land serving as a natural drainage channel. We had to relocate this channel to pipe flood and rain water safely past the rear boundary of the school land in order to remove the hazard of flooding the site and boundary streets.

Where Shall We Build?

AROL BURNS

Director of Real Estate, Los Angeles City Schools

as told to **VERNON MacPHERSON**

Director of educational housing, Virgil Volla, and the director of real estate, Arol Burns, stand before the artist's drawing of a new school building for Los Angeles.



SCALE IN FEET
0 75 150 225

15' EASEMENT FOR
DEPT. OF WATER &
POWER FOR
TRANSMISSION
LINE

TRACT
No 17470

KENTER AVENUE

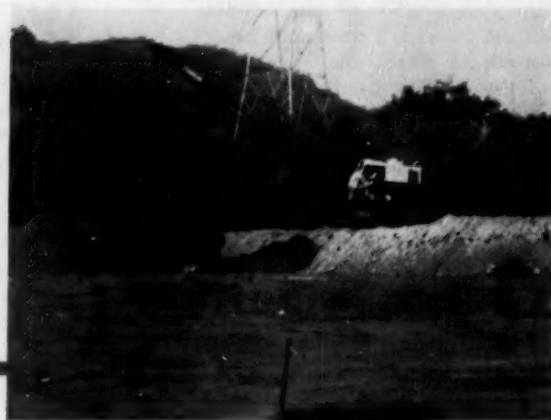
TRACT
No

8486

8' SANITARY
SEWER EASE-
MENT

TRACT
No 17994

This is the Kenter Avenue School site described. It was necessary to relocate the natural drainage channel. Here men are excavating a trench and installing a storm drain.



The crew now has a portion of the storm drain in place. The 6-inch drain pipe has been lowered into the trench by a crane. Now the back fill operation has commenced.

The general plan of the school site was such that movement of approximately 10,000 cubic yards of cut and fill was involved.



The city of Los Angeles has its mountainous areas, and recently it was forced to change the drainage pattern at one elementary school under construction. This is the site plan of Kenter Avenue School, with photographs showing some of the work involved.

The cost totaled \$38,000—\$50 a front foot—but it was necessary, both to eliminate this danger and to make more of the limited site (5½ to 6 acres) available for construction. In this instance we had to stand the expense of building the new channel because there was no other available site.

Although we have had no casualties or accidents in Los Angeles schools in connection with high tension wires, we still try to avoid building a school near such facilities because they constitute a mental hazard on the part of some teachers and parents.

Increased airline traffic and occasional horror headlines describing catastrophies resulting when gasoline-filled planes crash into buildings are warning enough that schools should be built safely away from runways. We follow the rule of banning school construction from areas within a mile of a landing approach or takeoff runway, and we insist that school buildings be at least ¼ mile from the side boundaries of any landing field or flight pattern.

Dangers of putting a school where children must cross a major highway also are obvious.

What about schools and traffic?

Even in a smaller town a school can be a traffic snarler. It is good planning to study the street patterns and to try and put the campus where good traffic circulation is possible. Deadend streets, narrow lanes and major arteries, therefore, should be avoided as school borders.

At the same time, we, as school land hunters, must consider the availability of public transportation to pupils and staff personnel.

The school in most communities should be near a thoroughfare, but not adjoining it, thus making the school easily reachable without creating traffic tieups. The latter are especially troublesome on rainy days or at athletic events when large numbers of automobiles are driven to school.

What has zoning to do with school land?

Plenty. Zoning is important both as to the potential school site itself and as to the surrounding areas. In most places a special permit is required to build a school in a residential district, where, best to serve the needs of the community, most schools should be.

Our realty men, therefore, always check informally in advance with the planning commission, which in Los Angeles must approve all sites and issue special permits for schools built in residential zones.

Surrounding areas' zoning is particularly important to the future enrollment of a school. We survey the entire area to be served by a school to make certain that we don't put a new educational plant in a place where the future population will decline before the community can realize the full value from the dollars its taxpayers must invest in the institution.

Cooperation by the planning commission also makes it easier for us to plan in advance for schools to be needed in new housing tracts, which have sprung up by the hundreds throughout our district in postwar years. The commission notifies us of the filing of new tract plans, and immediately we contact subdividers to enable them to set aside appropriate school sites before they start building homes. We have no power, of course, to require subdividers to cooperate, but the planning commission does have. We purchase the school sites from subdividers, paying a fair and reasonable price, as we do to any other owner.

On our land-use maps we designate parks, settling basins, airports and industrial zones. Few children will come from such areas because they contain few if any residences. Thus, their location will affect the choice of new school sites in the area.

What about the site itself?

There are a lot of things to consider in addition to central location, zoning, hazards, traffic and population studies. Some of these are as follows:

Drainage. To afford an easy runoff for rain water and to avoid flooding, a school site should have approximately a 2 per cent grade. Seldom is this exact slope possible, but by trying for the perfect site, we manage to buy land that is adequately drained and yet level enough to afford usable playground areas and reasonable grading and fill costs.

Utilities. Important cost items in school construction are the installation of utilities. If a site already has them, with assessments paid up, it is obviously worth more than the land without them. We always check the capacity of such facilities because, if they aren't adequate to carry the in-

creased load that would be imposed by a school, we know there will be additional expense for replacement, enlargement or rearrangement.

Soil. Soil tests should be made prior to acquisition of a site to determine if it is satisfactory for construction purposes. It used to be that filled ground could not be considered because of construction hazards and the possibility of the buildings' settling and cracking at a later date. Now, however, if modern control compaction methods are used, almost any type of school building that is properly designed may safely be built on a filled area.

The topography at a site is extremely important as large flat areas are needed for school purposes, and adverse terrain conditions can result in very high development costs.

Size. We have a rule of thumb on how large a school site should be. For elementary schools with an enrollment of from 500 to 700 we buy 7 acres (after streets and alleys are taken off). For each additional hundred students we acquire an extra acre.

The formula calls for 20 acres for a junior high with 2000 pupils; from 30 to 40 acres for a high school with 2000 pupils, and from 50 to 100 acres for a junior college with 2500 to 15,000 students.

Selection. We make a complete and detailed land use survey of the new school area to determine all possible locations for the new site. We study the various potential sites and set out the advantages and disadvantages of each. The study includes an estimate of cost for each site. Then we make our recommendation as to which should be purchased as best meeting all requirements for school purposes.

The final decision, of course, rests with the board of education, acting upon our recommendations as endorsed by the superintendent.

PRICE IS ONLY ONE FACTOR

A parting tip for school site seekers: Do not select the cheapest land merely because the initial cost is low. Other factors that might make a more costly site far more desirable should always be considered. Keep in mind the fact that a school building usually is used for a long period of time and that a few extra dollars spent in the beginning may be a good investment considering the length of time the institution is to serve the community.



A beginner is being welcomed at the door by a first grade teacher, with a self-assured first grader standing by as an assistant greeter. This is how orientation day begins at Mary Lynn School.

For first grade pupils it's

Orientation Day—With Flowers

ARLENE ROBERTS LAND

Teacher, Grade 1, Mary Lynn School, Tucson, Ariz.

THE hearts of many adults were gladdened by the joyous remark of a little extrovert in pigtails who exclaimed, "I just knew I'd like this school! The minute I saw all those flowers everywhere I said to myself, 'Sharon, this is a *nice* school.'"

It was orientation day at Mary Lynn School in Tucson, Ariz., when that spontaneous comment was overheard. The smooth planning by principal and teachers, done weeks in advance, paid off. All concerned enjoyed a day filled with interesting activities and at the same time with a feeling of genuine relaxation. In the eyes of the 65 preschoolers it was an unforgettable experience.

To begin with, a date was set far in advance, and care was taken that

no other school activity would conflict with the time set aside for the visit of the preschool children and their parents.

A survey had been made previously to determine the number of children within the boundaries of our school who would be eligible to enter in September. After the results had been checked, invitations were sent to each of these children and their parents. These were the beginning steps in a natural progression toward a successful orientation day. Each child and his parents were invited to come to school at a stated time to meet with the principal, teachers and school nurse. And of course the beginners were to visit each of the first grade classrooms in the school.

Principal-teacher conferences cleared the way for efficient planning in the first grade rooms of the school, for in these rooms lay the center of interest for the prospective first graders. And here, too, those young children would feel the atmosphere in which they would live in the months ahead.

In the first grade classrooms teachers and pupils prepared to be hosts to the visitors. Group discussions were held, and the present class members recalled their experiences and impressions of their first visit to Mary Lynn School. Valuable information, insights and impressions were gleaned from these informal talks. Ideas were offered as to what phases of school life would be most interesting to the preschoolers. It was agreed that the

visitors would enjoy something *they* could *do*. Definite plans were worked out in each first grade room.

The eventful day arrived. All was in quiet readiness within the school. The principal's office was abloom with garden flowers. More flowers decorated the registration table placed near the main entrance. Here sat three capable P.T.A. members who graciously registered each parent and child. Then a gay colored paper flower, bearing the wearer's name, was pinned on each beginner.

BOTH OBSERVE AND PARTICIPATE

A first grade teacher (whose half-day session classes had ended earlier) greeted the visiting children with a warm smile and a handclasp. The children were taken by twos or threes to the first grade rooms to be welcomed by young hosts or hostesses and their teachers. Here they were allowed to sit in the groups, to listen, to observe, and to participate as they wished. Later the preschoolers were given paper and crayons for a first-hand experience in self-expression. The loyng manner in which the resulting drawings were later folded to be taken home signified their value to these small boys and girls.

Two preschoolers are in the competent hands of a first grade guide as they view operations in one of the classrooms. Note the Red Riding Hood mural on the wall and the paper flower pinned to the boy's blouse. Orientation day requires weeks of planning by principal and teachers, but at Mary Lynn School everyone thinks the effort well worth while, and this includes the parents.



In one of the first grade classrooms a large bulletin board had been converted into a world of fantasy. The children had used paper sculpture to depict the story of Little Red Riding Hood. Now that the school term would soon be over the first graders were very capable in planning, painting and paper cutting. A most pleasing mural was the result. To surprise their visitors on orientation day, the first graders filled Red Riding Hood's huge basket with flowers, but not the garden variety. These flowers were especially created of suckers topped with lovely cut paper blossoms. The eyes of those beginners glowed with anticipation as they were presented with flowers fresh from Red Riding Hood's basket.

EACH CLASSROOM VISITED

A lovely display of "fairy flowers" added color to the scene in one corner of the room. In another area there were pictures and stories of pets, so dear to the hearts of all young ones, and displayed in another place were samples of first grade writing and number work. A bit of gaiety was added to the room by the large calendar for the month of May. Here a May Day scene was created with realistic

Maypole and streamers, with three-dimensional figures of dancing children.

A short session in each first grade classroom was allowed. This arrangement was planned so that no child would feel that one specific classroom or teacher would be the one to which he would be assigned in September. After this pleasant experience in the classrooms the children were all taken outdoors by a first grade teacher. Refreshments and simple games followed a get acquainted period.

As one small boy watched the line of sixth graders trooping out to the baseball field he exclaimed, "My aren't they big! How old are they?" Upon being informed that some were 12, others 11, he replied, "Oh, are there different kinds of old?"

Where were the parents who came to orientation day with their children? They, too, were welcomed, watched a program presented especially for *them*, and had an opportunity to become acquainted with the school and with one another. A committee of teachers and P.T.A. helpers greeted each parent. After informal introductions, short talks were given by the principal, the school nurse, and a special education supervisor. Each speaker stressed points of interest to parents of preschool children, and questions from the group were answered. The N.E.A. film "Skippy and the Three R's" was then shown.

When the film ended the principal distributed a pamphlet, "We Start to School," a handbook for parents of beginners prepared by the Tucson public schools. A bulletin from the school health department also was given to each parent.

PARENTS APPRECIATIVE

After the parents had a relaxing social period they were rejoined by their children, who had already completed their hour of orientation.

"This has been a most revealing afternoon," said one parent. "I'm sure I can help my next son off to school in a much happier spirit than I did our first one. If Jerry got as much out of this hour as I did we're both going to be better first graders!"

Yes, there were flowers on the speakers' table and bouquets in the classrooms. It was May, and orientation day in Mary Lynn School. And what more eloquent symbol of beginning and growth can one find than that revealed in the heart of a flower?



Three boys await a glimpse of a wood duck, guest in the bird box they have built. Studies in the area's geology, plant and animal life and natural resources dominate Camp Sargent's schedule.

Camp Week works wonders in

Schoolroom Without Walls

HAROLD B. GORES

*Superintendent, Newton Public School System
Newtonville, Mass.*

As told to

HERBERT R. CONE

THANK you for taking us to camp. We saw a lot of interesting things—jack-in-the-pulpit, sumac and juniper trees. We also saw ock balls [sic] which were balls with holes in them for the worms to go out. Under a rock, I saw a snake who wiggled away and swam into the water."

This quotation from a sixth grader's letter illustrates the excitement felt by a Newton school child on his first introduction to the world of nature. The letter is a source of much pleasure to Elinor Johnson, director of the program of outdoor education that makes

such experiences available to more than one thousand elementary school children in Newton, Mass., each year.

Since 1950, the Newton schools have conducted a "school without walls" in near-by Peterboro, N. H. During the fall and spring seasons, sixth, seventh and eighth grade classroom groups, under the supervision of their classroom teachers, spend one-week periods in residence at Boston University's Camp Sargent. In this forest setting a special program of instruction in conservation and the natural sciences is carried on. The enthus-

iasm of teachers and children for this unique undertaking has established it as one of the high points of the school year.

Camp week is an important contribution to a child's intellectual and social development. The course of instruction is related to one of the most significant and least understood problems of American life—conservation of our natural resources. The unique presentation of this problem in the "school without walls" dramatizes the challenge of conservation as no classroom lecture or reading can.

No less important, in his view, is the opportunity for learning social skills through "living together." For many children the trip marks the first extended separation from home and parents. A congenial experience in group living can ease the outstanding problem of early adolescence, that of achieving independence from the family.

Too, the maintenance of a tolerant group spirit can help the reserved or withdrawn child to enter into group activities. Conversely, children who have capacity for leadership have a good opportunity to develop this skill at camp.

Camp Sargent has fully weather-proofed accommodations for as many as 96 children. It has a resident director, a registered nurse, a counseling staff from New England teacher training schools, and kitchen and maintenance personnel. Children from the classroom groups are detailed to help with various chores in the kitchen.

William Vinal supervises release of banded Canada goose. He is professor emeritus of nature education at the University of Massachusetts.

The outdoor school day is made up of morning and afternoon instruction periods of two hours each. Rest periods, work assignments, and clean-up periods fill out the day. Evenings are devoted to square dancing, craft work, and the use of the camp's telescope for instruction in astronomy.

CHILDREN STUDY RESOURCES

Studies in the Peterboro area's geology, plant and animal life and natural resources dominate the schedule. Children observe the life cycle of the frog, inspect a burned-over forest tract, or learn the names of native trees and flowers in an experience that presents the world they live in in fresh terms. They also visit plants and facilities dedicated to resource management—MacDowell Dam of the United States Corps of Engineers, fish hatcheries of the New Hampshire Department of Conservation, a commercial lumber mill, and a plant that produces maple sirup from locally collected sap.

The outdoor education curriculum requires skilled teachers who possess a better knowledge of nature than the classroom teacher could be expected to have. A large number of "resource persons"—field workers of the federal Department of Agriculture and Department of the Interior, agents of the Massachusetts and New Hampshire departments of conservation, officials of the Newton fire department, and others—are invited to conduct classes. Significantly for the outdoor education program, the services of these experts are donated by their employers. One of the leaders of the special staff of Sargent Camp has been William Vinal, professor emeritus of nature education at the University of Massachusetts.

J. Bernard Everett, director of instruction for the Newton schools, places two emphases in the plan. He believes that the week at camp should be primarily a learning experience. Although time is reserved for recreation, the focus of attention is on organized learning. In this sense, the experience differs from that of the "summer camp," at which the end is



primarily recreational. Too, he has directed that lectures be held to a minimum so that children may be permitted to "do it themselves." Classes in forest management have enabled children to plant seedlings, assist in pruning and thinning, and select trees to be cut. In this way, he believes, the opportunities for use of the outdoor schooling are best realized.

Two teachers comprise the outdoor education program's full-time staff. Miss Johnson and her assistant, Harry Segal, are responsible for all phases of curriculum and arrangements. They conduct annual briefings for teachers who will accompany their "children" to Camp Sargent. They coordinate the plans with teachers, the camp staff, and parents of children who are to make the trip. They publish a comprehensive syllabus of instructions for camping teachers, which offers solu-

tions to all possible problems, except that of entertaining 30 active children on a day when the scheduled activity is canceled because of rain.

TRIPS WELL PLANNED

The cycle of planning is well established. Some months in advance of the trip the teacher is assigned the dates for her group's visit. These are announced to the class several weeks before the scheduled departure. Children are asked to formulate the goals that they [individually and as a group] might hope to achieve during the camping period. Teachers have found that this reflection "focuses" the camper's observation and makes the problems of orientation much simpler.

The following steps are matters of routine. The inevitable "forms" are circulated to parents. These are a health information questionnaire (which advises teachers of special care

and attention that a child may require), an equipment list for the camper, and a "release." Two steps complete the preparations. A meeting of parents of the campers is held, the project is explained and parents' questions are answered. On the day of departure, the school physician examines the campers for evidences of illness.

The teachers' endorsement of outdoor education has been wholehearted. Though the added responsibility that follows from the supervision of children during a 24 hour day has been a consideration, it has been outweighed by the pleasures of outdoor living. Many have reported that the extended opportunities for observation of their pupils have given them insights into personality that have helped them to be better teachers.

Others report that the stubborn passivity to instruction shown by some of their pupils has been broken down by the special stimulation of the week at camp. During a visit to a lumber

Newton's teachers have classes at Sargent Camp too. Here Professor Vinal conducts an inservice education session on the subject of the weather.





Sixth grade K.P.'s (above) assist in the kitchen at Camp Sargent. Dr. Vinal conducts for the teachers an inservice training class in geology (below).



mill, a child who had shown only distaste for arithmetic drills became eager to learn the formula for computing the yield in board feet from a large log.

Similar demonstrations of the exciting applications of the "three R's" have had a marked effect on the campers—whether in determining yields, writing reports of their experiences, or searching out titles to be read in a new field of interest.

One young girl volunteered to her teacher that she had found the most interesting activities of her week to be washing dishes and making her bed. She said that she could do neither at home—the task of making her bed is reserved to the maid and that of washing dishes to the dishwashing machine, which is considered to be too difficult for her to operate.

For such a significant experience, the cost to each camper's parents is \$13.50. This defrays the cost of transportation to and from camp and food for the week. This, for most Newton parents, represents a modest expenditure. Where possible or necessary, the school encourages the child to earn money in single or group work projects. A small fund has been set up to meet the assessment for children who would find payment extremely difficult.

SUBSIDY OF \$4 PER CHILD

To meet the remaining expense, that of paying the members of the permanent staff at Camp Sargent, the school committee has approved a subsidy of \$4 for each child. This is budgeted under general instruction costs—covering all teachers' salaries and other expenses.

Enthusiasm equal to that of campers and teachers has been shown by parents. In a recent poll taken among parents of returned campers only 1 of 157 indicated dissatisfaction with the value of the experience for his child. An unsolicited letter from a parent of a recently returned camper provides the most eloquent testimonial to this special experiment in education.

"Children," this mother wrote, "are so artificially stimulated today—by television, films and comic books—that they are actually deprived of the right to use their imaginations. It was a matter of surprise when my young son learned that the war paints used by American Indians did not come from cans! Please tell me what I can do to contribute to the success of the outdoor education program."



Teacher David Salazar calls his home on an army field telephone. An ordinance line-man during the war, he put this telephone in the Juan Tomas School (far left) so he could talk with his 5 year old daughter during year the child kept house for him.

Teaching a One-Room Mountain School—

a little rugged, perhaps, but satisfying

E. R. HARRINGTON

Director of Secondary Education, Public Schools, Albuquerque, N.M.

IN THE more populous states the isolated one-room school is almost a curiosity. Not so in the less populous states, the states marked by magnificent distances rather than by settlements; not so in some mountainous areas where there are no roads or the roads are closed most of the winter months. In such places the little red schoolhouse makes its last stand.

The Albuquerque public schools take in every public school in Berna-

lillo County. This is a small county as counties go in New Mexico, but it is still as large as the state of Delaware.

Albuquerque is an old town, having been founded before the birth of George Washington. It was founded by Spanish pioneers, and four flags have flown over the old square or plaza. Through most of its history the city has been a rugged place where the personal worth of an individual

amounted to more than his ancestry. (It has been only in recent years that ancestral background has been thought more important than the individual's quickness on the "draw.") The city grew into one that spelled opportunity for the immigrant, opportunity to grow in direct measure to his own ability and worth. There was virtually no personal distinction between Jews and Gentiles or between Catholics and Protestants. Little racial prejudice was

Mildred Walker, county home demonstration agent, instructs the Juan Tomas girls in sewing.





About half the pupils in the one-room school are pictured here. This school is the only one with a wood-burning stove in the Albuquerque system.

shown, and from the earliest the schools were without any segregation whatever.

There was a certain ruggedness about the schools also. Billy the Kid tied his horse to a tree at the edge of a school playground while he walked across the tracks to take a shot at one of the local citizens. In the early days of the city, before a program of taxation was organized, a considerable part of the school support came from police fines and the licensing of gambling houses and related houses of amusement. The people of the city believed in education and financed it any way they could. They selected the university for their town, rather than the politically more lucrative penitentiary, and named as its president a local businessman and banker, a Maine ship captain who had made numerous sailing trips around Cape Horn. The people took the attitude that first of all the schools must be organized and supported and once they were so established they should be made the best, academically. The people prided themselves on living in a civilized island of education and culture even in the

days of the Apache chief Geronimo. But Albuquerque was right down along the banks of the Rio Grande, and there were many small settlements back in the mountains which rose in a giant range 15 miles to the east. These small settlements lagged in educational activities, often being more concerned with the everyday problems of keeping alive, wresting a scant living from their high and arid fields, and keeping their hair from changing hands in an Indian raid. As years passed Albuquerque grew out of the Rio Grande Valley and climbed out over the great gravel plains between the river and the mountains. Roads became better, and the mountain communities were less isolated. Such communities built schoolhouses, and the county school superintendent manned the schools with teachers insofar as he could do so. Albuquerque grew into a city of more than a hundred thousand people, and the county schools passed willingly under city control. A new era began for the mountain schools. The Albuquerque public

schools were committed, as always, to the equality of opportunity for all children with no segregation because of race, color, creed or geography. The school buses brought in many pupils to the Tijeras Consolidated School, which graduated boys and girls from the eighth grade and then encouraged them to attend the high schools in Albuquerque.

But there were still several schools that could not be reached by the school buses. Several small communities clung tenaciously to their high mountain bean fields and their small flocks of cattle and goats. Some of these villages were more than a hundred years old and so isolated that life in them was like that of another century. Schools had been built by community effort, but it was difficult to keep the schools manned by teachers or to keep the curriculum geared to the community and to modern times. What could the Albuquerque public schools do with such a problem?

This article narrates what was done in a representative village, that of Juan

Tomas. The village is about a hundred years old and settled largely by people of Spanish ancestry. A hundred years ago a rancher named John Thomas ran cattle in those mountains. The village was built upon part of his ranch and named Juan Tomas, the Spanish equivalent of the rancher's name. Around this village for a hundred years the farmers have raised beans and cattle and goats. It has been a precarious life at times, but the people have clung to their lands. Neither drought nor Indian raids dislodged them, and there they are today. A road leads into the village and it is passable during dry weather, but in winter it is strictly jeep-and-weasel country. Also, the village has an altitude of a mile and a half; winters are cold, and transportation would be difficult even if the roads were good. It seemed to the Albuquerque public schools that this village needed a school of its own with a teacher with enthusiasm, knowledge, a fighting heart, and a ruggedness equal to that of the country itself.

SPECIAL SALARY INDUCEMENT

Albuquerque is committed to equality of training for teachers and a single salary schedule in most cases. Everyone except some special vocational teachers must have a bachelor's degree and suitable training for teaching. There is the realization, also, that an added amount of ruggedness is required in the mountain schools, so added salary inducements are given the people who are willing to meet this challenge.

The school teacher at Juan Tomas is young David A. Salazar. There were two Salazars with Coronado when that Spanish explorer entered New Mexico in 1540. If this Juan Tomas school teacher cared to do so he could probably trace his American ancestry back 50 years before the founding of Jamestown. This he refuses to do, realizing that his own personal worth is the important thing in meeting the village problems.

He was born in a high mountain village of southern Colorado, the son of a circuit-riding minister who preached a rough-and-ready gospel for the rough western towns. That the Salazars for some generations had been well read people is testified to by the rare collection of old books now in the possession of young Salazar at Juan Tomas. David spent some years in Santa Fe, N. M., being graduated from the Santa Fe High School into the

U.S. Army in 1941. He spent four years with the armed forces.

Upon his return to Santa Fe following the end of the war, Mr. Salazar attended the University of New Mexico. He elected to start teaching at this little mountain village of Juan Tomas. He had lost his wife, so he "batched" the first year, taking care of his two small children as a part of his work. The little girl was scarcely more than 5 years of age when she and her father entered the cooperative venture of making a home for themselves and the 3 year old boy. The girl stayed at home while her father took care of the many duties attendant on a one-room country school. Mr. Salazar installed a field telephone from his house to the school, and the little housekeeper could phone him when she needed some advice and instruction. When Mr. Salazar married again, Mrs. Salazar moved into the house and the hearts of the children and began helping with the community leadership.

The Juan Tomas school is a well built building of stone laid in adobe mud, a method of construction much seen in the Southwest. There 15 or more pupils attack the three R's, the intricacies of community living, and a hundred years of catching up with the world outside. Geography and social science are not subjects in a book; the teacher has seen geography made and has seen social science lived. When the children read a book showing pictures of the races and peoples of the earth's faraway places, Mr. Salazar has been there; he has seen those people in their native lands. To the culture starved villagers the teacher is a real breath of enlightenment. He has even gone into the farming business as a side line, and the villagers rejoice in their ability to teach him the intricacies of raising beans with insufficient rainfall.

Mr. Salazar's classroom has no electricity, but a battery radio set brings news from the outside. His is the only wood burning stove in the Albuquerque public school system. At night pack rats enter the school and carry off things that are not left in ratproof places. In the winter the children may see deer or bobcat tracks in the snow of the school yard, and occasionally a black bear has been sighted in the near-by woods.

JOURNEYS BY TRUCK

Mr. Salazar owns a truck, and a number of times a year, when weather

permits, he loads up all of his school children and takes them on a trip. Perhaps the trip is to Albuquerque, where they attend a moving picture show or take a conducted tour through a bank or a small factory. Sometimes the trip is across the mountain roads to another public school where there is electricity and they can see motion pictures. Perhaps the trip is to the state fair at Albuquerque, or perhaps it is a field trip to a farming community where the methods are good.

The teacher's truck is a real educational vehicle, and the teacher has planned his trips so as to bring the maximum enlightenment to his school and community. The Bernalillo County agents have cooperated in the educational effort. Once a week a demonstration worker shows the girls how to sew and make dresses. Every other week another county worker gives the boys special training in agriculture. All the while the program is centered on perfecting the children in the three R's, so that they can go anywhere in the world and have an even break.

I cannot help but contrast the Juan Tomas school with the one I attended on the Kansas plains 40 years ago. My teacher was a young graduate of the eighth grade. Her methods were just the ones she could remember from her studies the year before. Her travel had been confined to a radius of 50 miles and her reading to a few textbooks. To her a university was some sort of vague place afar off. She came in to inspire us with a love of knowledge and a desire to prepare ourselves for the world somewhere without. The strange part is that she did quite a fair job of doing it too. Some way or other she created a vision of better things that would some day be attainable.

This young Juan Tomas man is doing the same thing except that he comes "loaded" for the job. He has seen and been a part of that outside world. He speaks with authority of the faraway places with the strange sounding names. He inspires confidence in the student that he, too, may some day see all of those things, especially if he prepares himself for the task. The little red schoolhouse is on the way out in New Mexico, but until the time when it is completely eliminated in Bernalillo County, the Albuquerque public schools are proud of their insistence that the outlying areas shall receive the best instruction that can be made available.

A.A.S.A. CONVENTION DIGEST

First regional of year draws to St. Louis administrators from Midwest and South

NOTHING if not binaural, some 7000 school administrators and their associates—professional, lay and commercial—settled cozily in on old St. Louis. There as gray February faded into the mists and lamb-like March came capering in, the first of the 1955 A.A.S.A. regional conventions ran its four-day course.

Binaural? Precisely. With one ear the school administrators listened to on-the-spot politicians, professors and school headmen. The other ear was cocked toward Washington, straining for inside info on the President's federal aid bill.

Start to stop, it was a federal aid convention. On Monday morning Senator Case (R.-N.J.) tested out audience reaction to putting F.E.P.C. restrictions on federal aid to schools. By nightfall Senator Hill (D.-Ala.) was plugging his "billion in two years" bill for school construction. And in every hotel lobby and committee room the talk was on federal loans from the Republicans *vs.* direct aid from the Democrats. Both senators and another headliner, Arch N. Booth of the U.S.

Chamber of Commerce, viewed with alarm the nation's scarcity of engineers and technicians in the arms race with the Soviets. Both senators let fall some tender words for teachers. The teachers themselves (sure, I'm the superintendent of schools, but think of me always as a teacher) appeared to be primarily interested in more money for more classrooms. Their own fate came second.

Doubtless yearbook inspired, the schoolmen did take a sharp new look at themselves as administrators, their main concern being their relations with staff and community. Hi Willett, the incoming president, bade them free themselves from "kitchen detail."

Atlantic City will never match the grassy tinge of this St. Louis gathering. Up from the South and down from the Dakotas came small town and rural superintendents to swap troubled tales of tax levies, reorganization and undernourished curriculums in the cotton and corn belts.

As a people Missourians have the lowdown on the hoe-down. The Missouri State Teachers Association for

the late hours of Monday afternoon had invited everyone to a square dance. Free to all comers were orange bandanas, corncob pipes, and cooling cokes. A hot time was had.

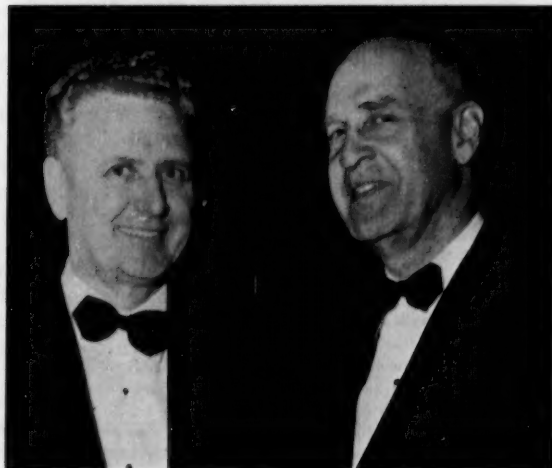
At all times the Associated Exhibitors were active and eager to assist. Many booths were prime examples of learnings technics. Their concert version of "Show Boat" played to a big house, following the first of three readings of two scholarship citations and the American Education Award.

Resolutions voted upon, but not to be adopted until the close of the third regional convention, included this one:

"We view with concern indications of continuing partisan domination of the U.S. Office of Education. Such domination conflicts directly with American tradition which for more than a century has been consistently separating education from political influences. We therefore urge the Congress to establish the U.S. Office of Education as an independent agency."

Another resolution expressed pleasure at the possibility of "progressive improvement of accreditation in teacher

President Jordan L. Larson chats with Sen. Lister Hill prior to Monday session when the senator "stood firm" on federal aid.



John L. Bracken, Clayton, Mo.; Ernest Barker, Pottawattamie County, Iowa, and H. I. Willett, Richmond, Va., hear St. Louis band.



BUTTONHOLE INTERVIEWS

Do you prefer regional meetings to national conventions?



C. E. AMEN, supt., Henry County schools, Mount Pleasant, Iowa: I'm a native Missourian so like the idea of coming to St. Louis. Actually, I prefer the regional convention, for we Midwesterners can get together to talk over "common problems, particularly our rural common problems. This is really a grass-roots convention. **M. B. LUBBERS**, supt., Wyoming Park schools, Grand Rapids, Mich.: Give me national conventions. I prefer them because the programs are superior.



ROBERT E. MARSHALL, sup. prin., Har-Brack schools, Natrona, Pa.: National meetings are better because they have a broader scope. Those who arrange them have more money to work with and can arrange a better program. Then I like being able to talk with superintendents and supervising principals from all over the country who have the same problems. We have already found one answer here to a compulsory retirement age problem. **JOSEPH S. QUIGLEY**, asst. prin., Har-Brack schools, Brackenridge, Pa.: We came to St. Louis instead of Cleveland because we hoped to get new ideas here. We wanted to see the St. Louis schools too. I too prefer national conventions. We'll be at Atlantic City this time next year.

Which part of the convention do you get the most out of?



D. J. HUENINK, sup. prin., Chetek, Wis.: I learn most from discussions of common problems in clinics and at round tables. **HAROLD S. VINCENT**, supt., Milwaukee: I head for the small group meetings and the exhibits. Especially the architectural exhibits. We're building schools all the time, usually four or five a year. We have a small annual tax levy for school construction, and in the last year have had two successful bond issues. So far we have managed without federal aid.

education" through the National Council for Accreditation of Teacher Education.

The St. Louis group also expressed its belief in intermediate district superintendencies. Furthermore, it proclaimed that "all problems of racial integration in our schools are capable of solution by intelligent, sane and reasonable citizens working together." It advocated that the present policy of federal grants to states for highways, hospitals and mental institutions be extended to include modernization and construction of public school buildings, including those areas affected by government projects.

SPEECHES THAT WON HEADLINES

Along came the Chamber of Commerce executive vice president, Arch N. Booth, to shock some optimistic listeners by saying:

"The United States is getting steadily poorer in manpower, qualitatively speaking. We have an imbalance of manpower and horsepower that foreshadows trouble for our economy and for our society tomorrow unless we raise the educational levels of our people."

Mr. Booth, the Sunday evening headliner, refuted the popular belief that our economy can keep on growing as our population expands. People-power isn't manpower. Manpower he defined as that proportion of our total population that is able to create and to produce. Manpower is another word for training—for education, leadership, vision, judgment, experience, discipline.

To create the necessary manpower is the job of the schools and colleges, along with business, Mr. Booth said. Business is assuming this responsibility in increasing measure by helping schools and colleges financially, by studying the schools' problems, by developing a better working partnership

between businessmen and educators, and by building a better understanding of manpower problems and of the importance of raising the educational levels.

A mutual security pact between A.A.S.A. and P.T.A. was proposed by Mrs. Newton P. Leonard, president of the National Congress of Parents and Teachers, sharing the platform with Mr. Booth.

Such a pact would guarantee lay participation not only in curriculum planning but in other school activities. "If you would have our firm cooperation and support, as well as insight into what we the people want of our schools, then you have to give us every chance to participate in school affairs," Mrs. Leonard stated politely.

"All of us have seen what has happened in communities where the public has not understood the goal of the school. Waiting until a crisis comes along to turn a passive public into an active and supportive one is only to court trouble. Then even the most concentrated kind of adult education may be too little, may come too late."

SENATOR CASE'S TRIAL BALLOON

"Tie in federal aid with progress in desegregation." That's Sen. Clifford P. Case's view on congressional aid for schoolhouse construction.

The senator from New Jersey thus used the A.A.S.A. as a sounding board for an idea so newborn that he hasn't yet phrased it for committee consideration, he said. In fact, he requests school administrators everywhere to help him work out such a tie-in.

"There's no other way out of the dilemma," Senator Case told *The NATION'S SCHOOLS*. "It is wrong for Congress to toss a lot of money to strengthen the pattern that the Supreme Court opposes. Federal money for schools should be keyed to subsequent enforcement orders of the Supreme Court—not in amounts of money but to areas of enforcement. Our highest court can be trusted to follow a sensible enforcement pattern, one that is moderate in practice. Federal aid could then go to areas where segregation is not practiced."

In 22 minutes on the A.A.S.A. platform Monday morning, the youthful looking New Jersey senator squarely faced more issues than many politicians face in a lifetime.

He suggested to "the biggest group of people I have ever talked to" another possible provision in pending

federal aid programs. A state might be given consideration for its performance in improving teachers' salaries. "This consideration might take the form of a reduced payment by such states in matching federal aid or perhaps by the granting of a larger amount of federal funds in consideration of such progress."

The Republican senator isn't going to let President Eisenhower down. He told *The NATION'S SCHOOLS* that he thinks the President's federal aid bill, with modifications, is a good bill, although he'd like to see direct aid to schools substantially increased. His hunch is that between the Eisenhower and Hill bills Congress will be able to work out some legislation that has the best features of both.

A former president of the Fund for the Republic, Senator Case is much concerned with civil liberties.

"Professional libertarians" too often are interested in protecting the civil rights only of those who agree with their ideas. All intellectuals are suffering now because some of them failed to recognize communism for what it is soon enough, the New Jersey senator asserted.

"We can assume that if we keep on our present secular level, communism can win the world struggle. We don't deserve to win in that case."

"It isn't that communism appeals only to poor and depressed people. It's got an appeal to the intelligentsia, who are groping for an answer to what man is all about. We must revive our

own belief in the sacred personality of the individual. Without God and without society man is unhappy. The schools must teach that it is wrong not to attempt to improve the other guy's life, that it is wrong not to attempt to make ourselves better than we are, that it is wrong to brutalize ourselves. These things the schools are doing, but they can do them more strongly; they can do them better."

SENATOR HILL AND HIS BILL

Federal aid's biggest moment of the conference arrived at 9:30 Monday evening. The blare of school bands and choruses died in a final flourish. The ceremony of presenting the presidential key ended felicitously. Then the

audience was allowed to meet a famous and favorite author, his latest hit being titled "S. 5."

Back in the saddle again following the Democratic victories of last November, Senator-Author Lister Hill, on the first legislative day of the new Congress, fulfilled his pledge to schoolmen and parents and brought out a new and revised edition of his great opus on federal aid for school construction (proposing \$1 billion in direct aid over a two-year period).

"Committee testimony makes it clear that, with the adoption of S. 5, at least 42 states, under laws already on their books, could begin at once to put federal grants to work along with state and local money," the Alabaman said.

BUTTONHOLE INTERVIEWS



Should federal aid for school-house construction hinge on Supreme Court enforcement of desegregation in the states?

HEROLD C. HUNT, *Eliot professor of education, Harvard*: For Congress to grant money that might be utilized by states for private education is unthinkable. It is unlikely that a federal aid bill can be passed until the Supreme Court establishes a pattern of desegregation. SEN. CLIFFORD P. CASE (R-N.J.): The idea of an F.E.P.C.

provision just hit me as I was preparing my speech for this convention. GEORGE E. WATSON, *state superintendent, Wisconsin*: Federal money should be made available to states in accordance with state standards of distribution. Presumably, state standards will be modified, when necessary, by coming Supreme Court orders.

Can or should schools teach about religion?



SAM MOSS, *asst. supt., DeKalb County, Decatur, Ga.*: So far as I know, there have never been any complaints from people in this county about Scripture readings in the schools. J. E. BURGESS, *prin., Avondale High School, Avondale Estates, Ga.*: We have 15 minutes of devotions daily, consisting of Scriptures and the Lord's Prayer. Teachers make no comment on what is read. Occasionally we bring in local ministers for assembly programs. C. L. HARPER, *principal, Stone Mountain, Ga.*: A state law in Georgia requires these devotions. This is a way of teaching spiritual values.

What should the minimum voting age be?



MRS. HARRY NELSON, *gen. sec., Alabama Congress of Parents and Teachers*: Twenty-one is a good age. At 21 they have a sounder, surer balance. MALCOLM G. COUCH, *supt., Scottsboro, Ala.*: I would say 21. At 18 they are interested in other things; they need more experience, more maturity. MRS. D. D. BLACK, *pres., Alabama Congress of Parents and Teachers*: If boys are old enough to go into military service at 19, they are old enough to vote. They would be conscientious about voting. They have recently had high school civics courses and are informed.

BUTTONHOLE INTERVIEWS

Will you continue to build separate schools for whites and Negroes?



NICK WALKER, supt., Shelby, Miss.: Yes. Between Shelby and Cleveland, Mr. Parks' town, is Mound Bayou, a Negro community of 200 square miles. The Negroes there have never wanted anything but segregation—whites aren't welcome. Negro education in Mississippi in the last five years has made strides beyond measure. **W. J. PARKS, supt., Cleveland, Miss.:** Ours is cotton raising delta country. Some of the Negroes own land and have share croppers of their own. The Negro used to have a mule, and he could go out and earn a day's living. Now he operates a \$4000 farm machine, and it can't be trusted to an untrained person. So we're trying to give Negroes and whites alike better training of a practical nature.

What are you emphasizing in your schools this year?



HAL N. BUCHANAN, supt., Cherokee, Okla.: For two or three years it has been health. We are one of the original five pilot school systems in a joint project of the state departments of health and education. We have both teachers and laymen in the act. Our chief emphasis is on nutrition. We hit that in the lunchroom, in high school home economics classes, in science classes in intermediate grades, and in health classes in lower grades. **EARL L. GEIS, supt., Alva, Okla.:** A high school curriculum improvement program. Once a month for a year and a half teachers, citizens, P.T.A. members, clergymen, and others have been talking things over. The biggest accomplishment so far has been that our staff members are better informed.

"Every day of delay deepens the crisis in our schools," Senator Hill told the A.A.S.A.'ers. His greatest concern is not with the classroom shortage, however. With federal money to help with housing, states and local communities can perhaps find ways to finance even more important educational matters.

"Our country has been willing to limp along on an educational system that is wholly inadequate for turning out sufficient numbers of highly trained citizens and for meeting the multiplied demands for moral discipline and wisdom of great affairs. The hour demands a radically higher and different concept of education.

"Survival in this era of warlords rests upon our ability to marshal superior brain power against the brawn of overwhelming numbers. And our edge is slipping away as our educational system falls further and further behind in quality and quantity of product. Meanwhile Russia is pushing her educational efforts to unprecedented heights," the senator said.

"The hour also demands a Bill of Rights for the teacher. He must be guaranteed a good salary, recreation and travel, continued study, security in old age, and freedom from petty restraints and interferences with his

personal life. He must be protected from unprincipled demagogic attacks that fetter the mind, breed suspicion and fear, and threaten the very destruction of public education," the senator forcefully concluded.

YEARBOOK ADVISES SUPERINTENDENT

The administrator who passes out his directives in the spirit of a Moses just returned from Mount Sinai is out of date.

The newer concept of "Staff Relations in School Administration" was presented by Henry I. Willett, superintendent at Richmond, Va., and chairman of the 1955 A.A.S.A. Yearbook Commission, Monday morning.

"Most of what is involved in the newer concept," said Mr. Willett, "grows out of what we have learned about human behavior and plain common sense."

He urged superintendents to analyze their own jobs and evaluate how well they are meeting the requirements. "We should constantly bear in mind that school administrators must maintain vision and balance, an attainment which will require strength of character and devotion to duty based on high moral principles.

"This suggests that the superintendent must free himself from the

'kitchen detail' for a part of the time. Otherwise, he will not find time to think creatively or to plan effectively. His chief contribution will grow out of his ability to lead others into a greater understanding of how people can live and work together effectively."

PUBLIC ADVISES SUPERINTENDENT

What does the public expect of the superintendent of schools?

When Russell T. Gregg, professor of education, University of Wisconsin, asked this question of a group of administrators, he got 21 replies. These replies indicated, he told a Monday afternoon discussion group, that the public expects the superintendent of schools—

1. To provide educational leadership for the continuous improvement of the educational program.
2. To be approachable, friendly and sympathetic.
3. To inform the people about the schools.
4. To take an active part in the affairs of the community.
5. To spend the educational tax dollar wisely.
6. To select and develop a competent school staff.
7. To place the welfare of children above all other considerations.
8. To stand for what is right and good for the best interests of the schools.
9. To be frank, straightforward and honest about school problems.
10. To plan and maintain a good school plant.
11. To anticipate and to evaluate problems which may face the schools in the future.

Omer Carmichael, superintendent at Louisville, Ky., would add a 12th qualification—courage. "There is not much wrong with American education today that can't be solved in time by courageous superintendents and boards," the A.A.S.A. vice president said.

DEALING WITH NONPROFESSIONALS

William Chilton, assistant superintendent in charge of business affairs, Louisville, Ky., placed strong emphasis on personnel policies for non-professional employees at a Monday afternoon discussion group meeting.

He listed these six essentials:

1. The management of school personnel must be internal. "The leaders of education in America can ill afford to have this responsibility taken over by outside groups."

2. Personnel policies must be written and made available to all employees of the board.

3. The policies should be presented in an attractive and informal manner.

4. When possible and feasible, personnel policies should be made to apply to all employees of the board.

5. The board of education should adopt broad policies leaving the operational procedures and details to the administrative and supervisory staff.

6. The policies should list broad principles concerning (a) position classification plan; (b) inservice training program; (c) supervision; (d) employee ratings; (e) promotions, demotions, transfers and dismissals; (f) tenure and retirement; (g) sick leave, vacation and holidays; (h) pay schedules, and (i) line of authority in solving problems of employees.

ACCENT ON HUMAN RELATIONS

At the Monday afternoon discussion group on "The Personal Factor in School Administration" Orin B. Graff, head of the department of educational administration and supervision, University of Tennessee, and Howard Eckel, associate professor of education at the University of Kentucky, agreed universities should pay more attention to human relationships in their programs for administrators.

The question is what should they do and how can they do it?

To indicate the kind of leadership qualities superintendents need to be helped to develop, Dr. Graff referred to a study of the 11 most influential men in a certain county. The men differed widely in their beliefs but together represented every type of belief in the community. They had these characteristics in common: (1) They had operational beliefs in all important areas of living; (2) these beliefs were internally consistent; (3) the men had a good comprehension of what they believed; (4) each enjoyed respect for his prominence and affection because of his right treatment of others; (5) each took a firm stand on every issue.

SUGGESTIONS ON BUILDING

A ranch type of primary unit that can be sold as a house if the day ever arrives when it isn't needed as a school is one answer to the building shortage in Flint, Mich.

Supt. Spencer W. Myers told a Monday afternoon discussion group that these units (for kindergarten through first grade) cost about \$11,500, exclusive of the cost of site and equipment. The per pupil cost (figured on a class size of 32) is about \$375 as compared to from \$1200 to \$1700 in a traditional school building. The primary units can be built on a standard building lot with a 60 foot frontage.

"It is time that we reviewed our building codes objectively in terms of new materials, new practices, and new knowledge," Paul W. Seagers, associate professor of education, Indiana University, told the same group.

He urged that codes be reviewed every year and revised when this is desirable. "Many building codes in existence today," he pointed out, "are founded upon fallacious theories, prejudice and, in some instances, practices backed by vested interests. Codes should not be restrictive and should allow for a reasonable degree of experimentation. However, they should protect the safety, health and education of the pupils. The degree to which this is necessary should be determined by permanent continuing commissions."

WHERE REGIONALISM IS GOOD

"Some of our modern school building design is best described as *unique* and could not be considered as producing a totally functional and attractive plant."

This opinion was expressed by George D. Englehart, director of school building services, Missouri State Department of Education, at a discussion group meeting on "Beauty and Function in School Building Design" Tuesday morning.

Each school plant presents individual and special problems, explained

BUTTONHOLE INTERVIEWS

What do you think of President Eisenhower's school aid plan?



FERRIS HERING, supt., Glenside schools, Muskegon, Mich.: I'm not too well satisfied. It isn't going to give the aid where it's necessary. Of course, our school is in a distressed area (tank and airplane motor plants). We have just received a \$75,000 grant of federal money. RUDY SCHMIDT, dep. supt., Muskegon County schools: In April we hope our county will vote an extra millage so that we can construct an education building for the county board. If we don't get that, we would accept federal money, whether Eisenhower or not.



WILLIAM GUSSNER, supt., Jamestown, N.D.: It doesn't go far enough. Most schools need aid badly for construction, but I would be inclined to favor Senator Hill's bill. Our district is bonded to the limit, so we are trying to stretch out our building program over a long time. We have a new school under contract and not enough money for it. C. L. ROBERTSON, professor of education, Jamestown, N.D.: It may be a start in the right direction, but I don't like any interference with state and local control. Too much bureaucracy now.



MARK F. HAWTHORN, supt., Anderson, S.C.: All states need school buildings, but each is making arrangements for building them according to its own pattern. Last year South Carolina built more schoolrooms for its size than any other state. JESSE T. ANDERSON, state supt., South Carolina: South Carolina doesn't want to borrow money from Uncle Sam. But we'd like federal money for school buildings without federal control. The Administration bill does not have provisions that would permit South Carolina to use it now.

Mr. Englehart, and therefore offers the designer a challenge to find the best possible solution for that particular project.

He does not think that we should accept the belief of some school designers that all that has been done in the past was bad and everything done in the name of modern contemporary architecture is good.

A practice Mr. Englehart warned against is that of using a design, outstandingly successful in a particular situation or section of the country, in another area that may have entirely different problems and climatic conditions.

ATTRACTING MORE TEACHERS

Some forty administrators climbed to the fourth floor of the auditorium Tuesday afternoon for a discussion on ways of meeting the teacher shortage.

When they got there, T. M. Stinnett, executive secretary of the National Commission on Teacher Education and Professional Standards, had no very copulating words for them. They can forget the comforting theories that a depression will send thousands of former teachers back to the classrooms or that in the future colleges will graduate enough teachers to fill the vacancies.

In the next 10 years, the total population is expected to increase 30 million but the working force will increase only 4 million—and the competition for them will be tough.

But if administrators and teachers are willing to face the problem, there are things they can do to compete for personnel. Lowering standards is no answer because that drives out some of the teachers who respect their profession and discourages capable prospective teachers.

Any measures, such as not assigning the worst jobs to beginning teachers, that will reduce the number of teachers who leave the profession every year (about 7 per cent of the total number) will help. Teachers need to have their working loads reduced; much of their clerical work can be eliminated, for instance.

Each school system, thinks Mr. Stinnett, should resolve to try each year to induce a number of capable students equal to the number of new teachers needed by the system to begin teacher training.

Every teacher can be on the lookout for potential teachers in his classes; a formal course, perhaps covering other fields too, may be offered in the high

school. Such a course should offer practical experience as well as theory.

If the school system is selective—and that "if" is very important—a short-range solution may be recruitment of former teachers and liberal arts graduates whose children are grown. The school—or perhaps a nearby college—can give them refresher courses, said Mr. Stinnett.

KEEPING YOUNGSTERS IN SCHOOL

For their "incomparably difficult task," secondary school principals and teachers received five recommendations from the "godfather of the Illinois curriculum program," Harold C. Hand, professor of education at the University of Illinois. Some 600 high schools are working at self-improvement in the Illinois curriculum program.

What makes high school teaching and administration so almost unbearably hard is meeting the needs, in a way they will respect and respond to, of masses of students with every conceivable shade of intelligence, background, means, interests and expectations, Dr. Hand declared. He suggested:

1. Reduce hidden tuition costs. It costs the parents so much to send their youngsters to a free high school that 75 per cent of the drop-outs occur among people of low income.

2. Offer core courses. This type of curriculum makes more sense to more youngsters. And it is not a poor preparation for college.

3. Provide double or triple track offerings. The difference in content will give college preparatory students the work they need and still provide

for the three-fourths who plan to go to work.

4. Revise the reporting system. Give up the scrambled egg approach and report to parents separately on these three bases: (a) estimated capacity; (b) comparison with others; (c) in terms of an outside criterion, if possible.

5. Do a far better job of guidance. Every teacher must be a guidance worker with a specialized guidance counselor to help inform the teachers and to handle directly youngsters with difficult problems.

ANSWERING THE CRITICS

Harassed by so much misunderstanding in the press, from the platform, and at P.T.A. meetings about the modern way of teaching, school administrators flocked to a Tuesday afternoon session titled "Helping the Public Understand Good Teaching Practice."

Modestly thinking this would be an intimate gathering, Chairman Irving F. Pearson of the Illinois Education Association had brought his speaker and the panel down from their platform perch and, seating them in an arc on the main floor, had asked the delegates to group themselves informally about after the fashion of an elementary school classroom of today.

But hundreds of schoolmen poured into the hall, and midway in the proceedings the panel resumed the platform by popular demand.

To introduce the subject G. M. Coleman, assistant superintendent of schools in charge of instruction at St.

Missouri teachers called their Monday afternoon party a "Show-Me Hoe-Down."





For the first time in St. Louis, Negro and white students sang together as an All-City High School Chorus. Their first public appearance as an integrated group was at Monday evening's general session.

Joseph, Mo., told of his own school system's efforts to combat the rising tide of criticism of the public schools. The school must seize the initiative, he declared, and explain to the public how it teaches numbers, reading and spelling and why.

In St. Joseph, a group of primary teachers—it was their own idea—takes a reading group to city clubs. The school furniture goes along so that the children will feel somewhat at home in their strange environment. Then, in the spring before the kindergarten child enters school, his parents get a handbook from the school; the same thing happens the spring before the first grade child enters. When September rolls around and school begins, the parents get another handbook, "How Can I Help My Child Learn to Read."

Before the school can hope to make any great inroads on public criticism, declared Mr. Coleman, the school administrator must see that:

1. Every teacher is convinced of the soundness of the teaching program and of her part in it.
2. School personnel must seize every opportunity to answer the critics' questions intelligently.
3. Teachers must be acquainted with educational research in regard to modern *vs.* traditional teaching so that they can interpret the instructional phases of school progress to the public.

Meeting parents' criticism is especially difficult on the high school level, Mr. Coleman finds. Many parents have never gone to high school themselves and they assume that every radical departure they read of in the newspapers is being locally applied.

St. Joseph high schools periodically invite personnel managers of local

businesses and industries to a conference, to make them cognizant of the limitations of many of the high school graduates. The school opens up to personnel men, on request, records and ratings of prospective employees.

In another large assembly hall at the same hour an audience of like amplitude was getting and giving evidence that schools with core curriculums are outclassing the traditional schools in every area that has been studied: academic achievement, physical fitness, good conduct, family living.

Harold C. Hand, professor of education at the University of Illinois, cited the research findings, chapter and verse, and badgered superintendents, teachers and P.T.A. leaders took down the references to refute the schools' critics.

All the evidence in every study gives the new ways of teaching a decided edge over the old, yet the newer ways of doing things are still on the defensive.

TAKE MUZZLE OFF TEACHERS

Is the teacher to be muzzled when talking about the U.N.?

Max McCullough answered that question to the seeming satisfaction of his audience Tuesday morning. Mr. McCullough is executive secretary of the U. S. National Commission for UNESCO. Said he:

"Temporary fears and local agitation may occasionally obscure the proper course for a school or for a single teacher, but the right to knowledge cannot long be withheld or turned aside in a society of free men. And the right to know includes the right to know as much about the U.N. system as the teacher can present or the pupil discover.

(Continued on Page 108)

Incoming President Lists

Three Problems Ahead for A.A.S.A.

ASKED to name three major problems with which he feels school administration should be especially concerned during the coming year, H. I. Willett, superintendent of schools at Richmond, Va., and incoming president of the A.A.S.A., answered:

1. "One of the biggest problems facing American education is the recruitment and holding of top-level teachers in the profession. This problem must be solved by lay people in their respective communities, although some of these communities may need financial assistance.

2. "Consideration must be given to salaries and teachers' status in the community. Both considerations must be taken together if we are to solve the teacher shortage problem in a manner that will assure good teachers for the oncoming flood of boys and girls.

3. "Careful planning with the community is needed in determining more specifically *what* is the job of the

schools. We are now attempting in many cases to do more than can possibly be done well within the present limits of time and resources. Colleges and universities should be brought into this planning to give counsel and to gain understanding relative to the total school responsibility. This cooperative planning should involve a careful appraisal of how effectively the schools are now performing such functions as teaching the three R's, discovering and developing talents; contributing to vocational competence, and producing alert, energetic, courageous, straight thinking, fair minded citizens who have the ability, desire and understanding necessary to make American democracy live.

"The A.A.S.A. should furnish leadership in this appraisal in bringing the full impact of education to bear on the problem of democratic citizenship not only in this country but in the free world."

Observes the First Forty Years

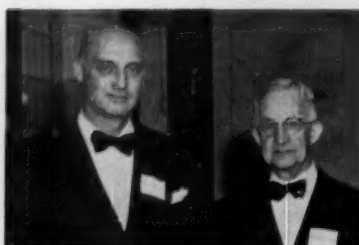
of effort to make education a science

THE evolution of educational research during the last 40 years was the theme of a human interest drama Monday when the American Educational Research Association celebrated its 40th anniversary.

Special guests at the annual banquet were Stuart A. Courtis, one of the three living members of the group that organized the National Association of Directors of Educational Research back in 1915, and J. Cayce Morrison, veteran researcher for the New York State Education Department.

Those early and oft-discouraging efforts for the recognition of research as a field of service to education were recalled by Dr. Courtis. Of the group of eight who organized to "develop a science of education," Dr. Courtis, B. R. Buckingham, and George Melcher are the three living members.

"I recall," said Dr. Courtis, "that our efforts to study education as a science caused us to be looked upon as 'a little queer and suspect.'" Vividly reminding his audience of what has happened in other fields of science within a lifetime, Dr. Courtis told the 150 research specialists attending the banquet that he was born two years before the telephone was invented. Implying that he has shown more courage than some of his colleagues, he said, "I used my tests



New president of A.E.R.A., Francis G. Cornell, University of Illinois, has been visiting here with one of the association's former secretaries, William S. Gray, director of research in reading and emeritus professor of education, University of Chicago.

to measure my own teaching. And when I came to the conclusion that my tests were not what I wanted them to be, I withdrew them from the market."

At the age of 80, Dr. Courtis still is looking ahead toward realization of that dream of 40 years ago of developing a science of education. Since 1950, he has been active in new research and during the past year was instrumental in founding a new society, the Association for Research in Prediction and Control of Achievement.

"Perhaps," he said, "in another 40 years I can come back and tell you what's wrong with what we are doing now."

Greetings from B. R. Buckingham were read at the banquet. He also pre-

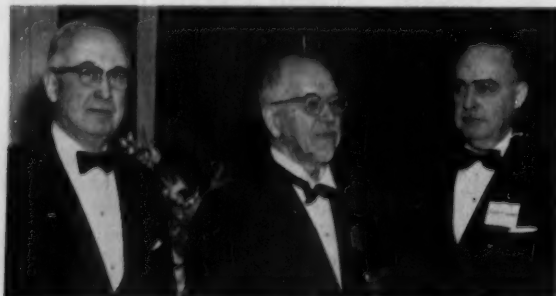
dicted that we are entering a phase in which cooperative research in education will become international in scope.

Dr. Morrison picked up the history of the organization from its earlier struggles to publish bulletins and year-books through its early years as a department of the N.E.A.

Greater emphasis upon the kind of education that will enable us to understand and get along peacefully with the peoples of other countries was the appeal of Thomas S. Hall, dean of the college of liberal arts, Washington University, another speaker.

"The major imminent development in human affairs will be the narrowing of the cultural gap between the more and the less cultured countries. Chief contenders for leadership and influence in this cultural development are the United States and Russia. This trend has implications for the character of liberal education in America. We need adults who understand the potentialities of all people for self-realization; we need citizens with a concern for the good of all mankind. We need to revise our general education to give more consideration to the humanities and the social sciences, utilizing more materials and resources from other countries—as contrasted with vocational specialization."

Leaders in three eras of A.E.R.A. history (left to right): J. Cayce Morrison, director of the Puerto Rican study for New York City, was president during the transition period when the Educational Research Association became a department of the N.E.A. (1930); Stuart A. Courtis, 80 year old professor emeritus of the University of Michigan, was one of the eight founders of the association 40 years ago, and Frank W. Hubbard, director of the N.E.A. research division, has been secretary-treasurer of the research association since 1946.



Three moods suggest future, present and past in this group: Contemplating the work ahead is Percival M. Symmonds, vice president-elect of A.E.R.A. and professor of education, Teachers College, Columbia; pleased with the large attendance at the 40th anniversary program is Hermann H. Remmers, director of educational reference at Purdue University, whose duties as president are ending, and in a reminiscent mood is W. W. Thelsen, an A.E.R.A. president of earlier days, and now assistant superintendent of Milwaukee public schools.



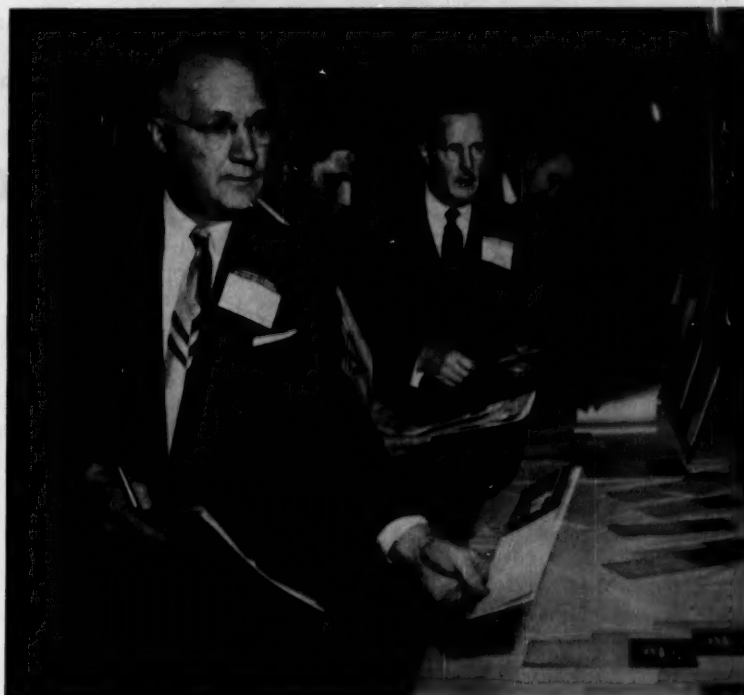
SUPERINTENDENTS who wonder what their board members talk about in convention assembled could get their answer this year in two terms—federal aid and research. It was a schizophrenic sort of situation, too, for the National School Boards Association, because its two major concerns were rather unrelated. On the one hand, the board members were faced with policy decisions on the hottest national political school issue in a long time, while on the other side the generous hand of the Fund for the Advancement of Education was holding out promises for a long-range enlarged program of research and service.

Perhaps the timing was accidental, but the Bennion subcommittee report saying "federal aid for buildings is not necessary" was released to the press on the first day of the N.S.B.A. meeting, and Adam S. Bennion himself was the final speaker at the closing session of this 15th annual program. Dr. Bennion gave the lightest touch possible to the subject everyone wanted to hear him talk about. "Recent news reports about the committee's findings are based on partial and incomplete data, and the story was not basically correct," he said. What *was* correct was anybody's guess.

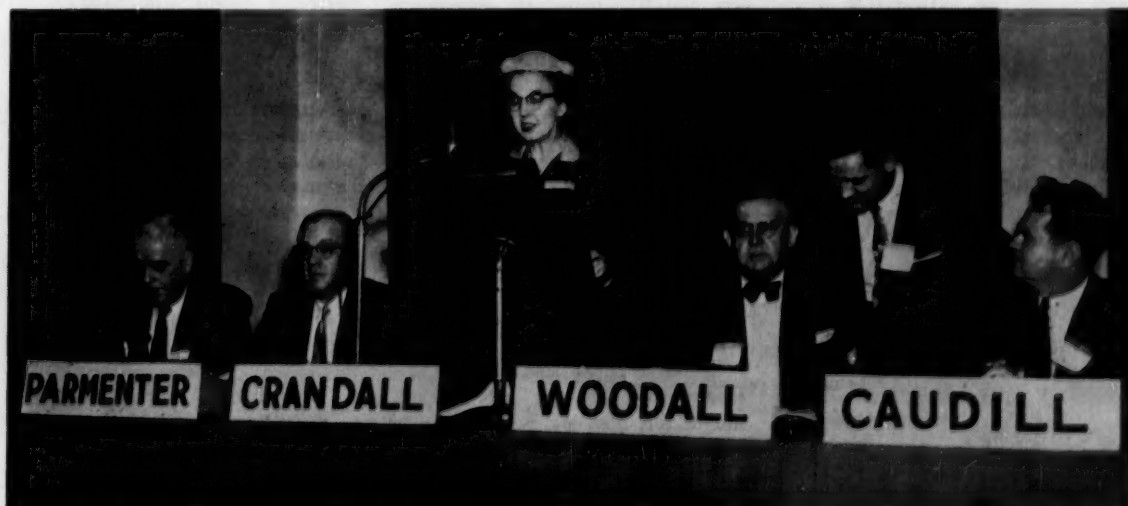
Dr. Bennion based most of his comments on his "discovery" of what he called an "apparent shift away from the solid subjects." He was sure, he said, that it is easier today to "get by" in such courses as social studies than it was in the good, old algebra, geometry and history of years past. Dr. Bennion's remarks drew applause and obvious approval from the school board

(Continued on Page 112)

Endorses Federal Aid for Buildings: Launches Research Plan



ABOVE: Four men view an exhibit gathered from different state school board associations. They are C. Raleigh Phillips, superintendent at Coulterville, Ill., and a Coulterville board member, Stanley M. Shaw; Don Stevenson, vice president of the Illinois Association of School Boards and a school trustee from Elburn, Ill., and Harold H. White, chairman of the board of education at Barnsdall, Okla. BELOW (left to right): Members of one of the "rotating panels." Lew Parmenter, senior counsel, N.S.S.I.; William H. Crandall, St. Louis insurance executive; Mrs. Prescott Scott of Hecla, S.D., a director of the national association; J. H. Woodall Sr. of the Georgia association; (standing) O. H. Roberts Jr. of Evansville, Ind., the new president, and William W. Caudill, an architect from Bryan, Tex.



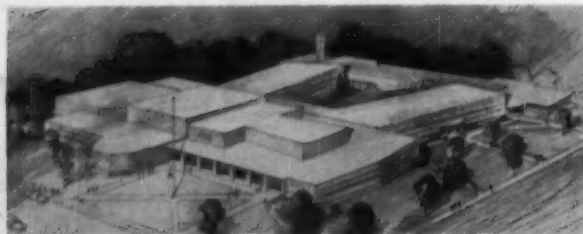
PARMENTER

CRANDALL

WOODALL

CAUDILL

SCHOOLHOUSE PLANNING



Junior high school at Wauwatosa, Wis., places great emphasis on guidance and counseling activities. Therefore, the plans call for —

Classrooms With Conference Corners

HARLEY J. POWELL

Superintendent of Schools, Wauwatosa, Wis.

THE average classroom is designed so that the space in the corners of the room is largely wasted, as far as effective use is concerned. The staff members of the Longfellow Junior High School, Wauwatosa, Wis., in our planning conferences for the new school, indicated in positive terms that a conference room, adjacent to the classroom, was a necessity if they were to be responsible for the guidance and counseling of pupils. Would it be possible to design a classroom in which a corner of the room would be utilized as a conference room?

The program for this school places great emphasis upon guidance and counseling activities. While specialized guidance service is available, it is recognized that the teacher to whom the child is assigned is still the key person in the guidance program. The average teacher finds it difficult to carry on effective, individual guidance work in the regular classroom. After extensive consideration by members of the staff, it was agreed that an area should be set aside from the classroom which would be large enough for the teacher's desk and would provide space in which the teacher could carry on individual conferences in private, while supervising the study and work activities of the class.

NO INCREASE IN COST

A further study showed that the inclusion of this space would not necessarily increase the over-all cost of the building. The classroom space can be used all day without interference with the work of the teacher regularly assigned to the room. A

visiting teacher can use the classroom space during the unassigned period of the regular teacher, while the regular teacher carries on her usual activities, including guidance and counseling, in the conference space. But, to make the space function in this manner, there must be direct access to it from the school corridor.

PROGRAMS ANALYZED

Members of the staff were asked to analyze their programs for one week and to note the type and frequency of activities that they would have carried on in a conference room had such a room been available. The activities listed in the order of frequency are: (1) conferences with individual pupils, (2) make-up work and tests, (3) individual help for pupils, (4) student committees, (5) program planning, (6) special projects, and (7) temporary segregation of a pupil.

From these ideas a study involving our staff and the architects, Ebling, Plunkett & Keymar, Milwaukee, was started. It resulted in our placing a partition across the corner of a classroom and using this space as a conference area for the adjacent classroom. (See floor plans and photographs of models.)

These are some of the advantages of this plan:

1. It was possible to acquire 50 square feet of floor space for the conference room without increasing the size of the classroom.

2. In working with a model and scale size furniture, we found that a triangular shaped room provided bet-

ter and more flexible accommodations than either a rectangular or a square room of equal size would.

3. There will be direct access to this conference room from either the corridor or the classroom.

4. The glass partition between classroom and conference room will allow for supervision of the class when the teacher is in the conference room.

5. The classroom may be used 100 per cent of the time without interference with the work of the regular teacher during her unassigned period. The traveling teacher and students will have direct access to the classroom. The regular teacher will have her desk and materials in the conference room, and she can reach it without disturbing the classroom. This increase in the use of room space will offset additional costs of constructing the conference space. A suite of four conference rooms will be provided for the traveling teachers.

EFFECT OF PARTITION

The next question concerned the effect of the diagonal partition on the use of the classroom. Here, again, the answers were positive. No fixed pattern of seating arrangement is anticipated, and various possibilities were studied. A typical plan is shown in an illustration. Here the seating is in a diagonal plan which many think makes the best utilization of natural light. With chalkboard across the diagonal wall, the pupils are at right angles to the chalkboard. The corner near the corridor door provides a circulation space for pupils entering or leaving the room. The rear

corner, on the outside wall, becomes a reading activity corner with built-in cases and reading counter. Two movable tables fit against the outside wall when they are not used otherwise. The front outside corner may be used for display and exhibits. Thus, we can utilize a floor area, 36 by 26 feet, to provide adequate space for pupil seating and teacher's desk, with one corner providing a conference room for the adjoining classroom and the other corners being utilized as indicated.

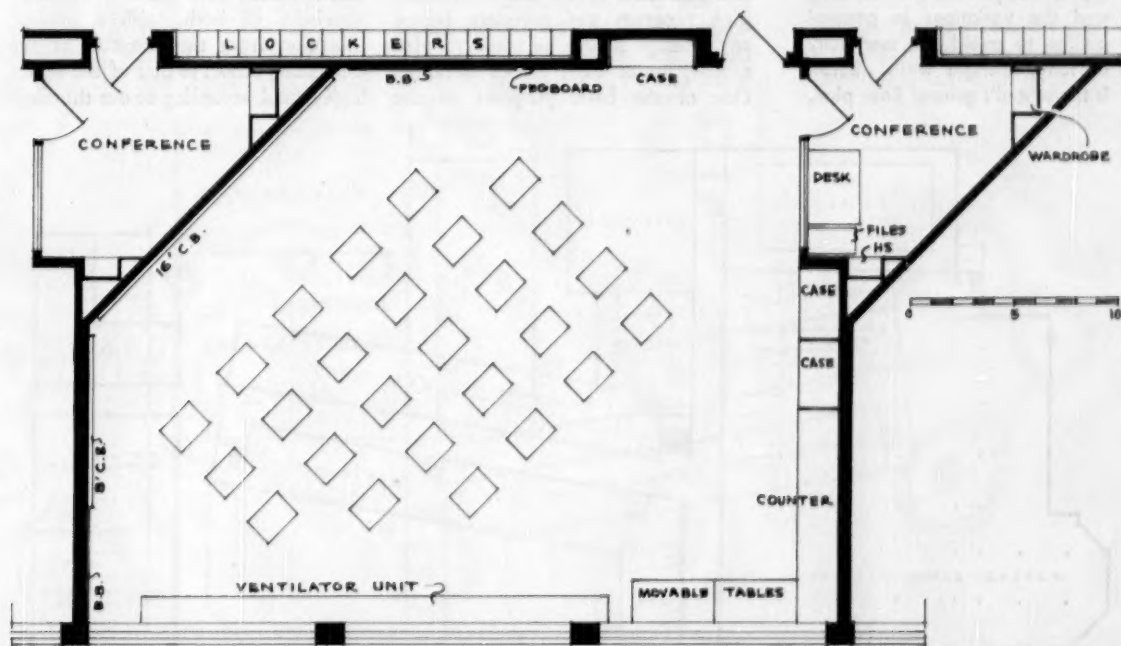
OTHER FEATURES

Other features of the room will include a display case with glass doors, supply cabinets, bookshelves, a bulletin board, and a peg board. Light will be transmitted to the corridor through glass in the wall above the lockers.

Recessed low brightness fluorescent fixtures will provide artificial light.

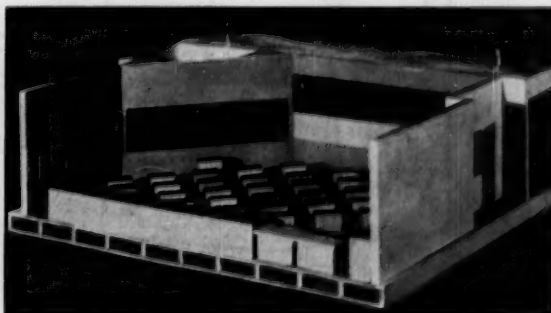
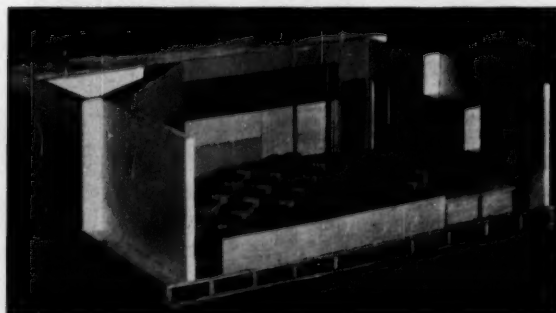
The conference room plan, as described, can be used only in a series of rooms and then varies in its application to the rooms at either end of the series. This provides for variation in the rooms. There are 21 rooms where it was possible to consider the conference arrangement. Nine of these could be developed according to the typical plan. Five end rooms were enlarged to 48 feet in length and each has a rectangular conference room. The other seven have conference rooms, but the classroom has the full 36 by 26 foot dimension without the diagonal corner. Thus, we shall have flexibility as far as class size and utilization of space are concerned in the new junior high school.

However, conference rooms were only one of the "musts" in the educational specifications for the new school. Our problem was to plan an efficient, safe and healthful learning and teaching environment for 1200 junior high school pupils and 52 staff members. For some 25 years Longfellow Junior High School had been housed in the building which also serves the senior high school. As enrollment in both schools increased, space became more crowded, and the individual identity of the schools almost disappeared. The program of the junior high school became little more than an adaptation of the senior high pattern. This was contrary to the general philosophy of the Wauwatosa schools, which recognize that the program of learning experiences and instruction must be



Above is a plan of a typical classroom in the Longfellow Junior High School and below are two views of a model of a classroom, showing location of the conference room. This conference area will be accessible from either the cor-

ridor or the classroom. Glass in the wall of the conference room will permit the teacher to observe the class while she is working in the conference area. Architects for the junior high are Ebling, Plunkett & Keymar of Milwaukee.

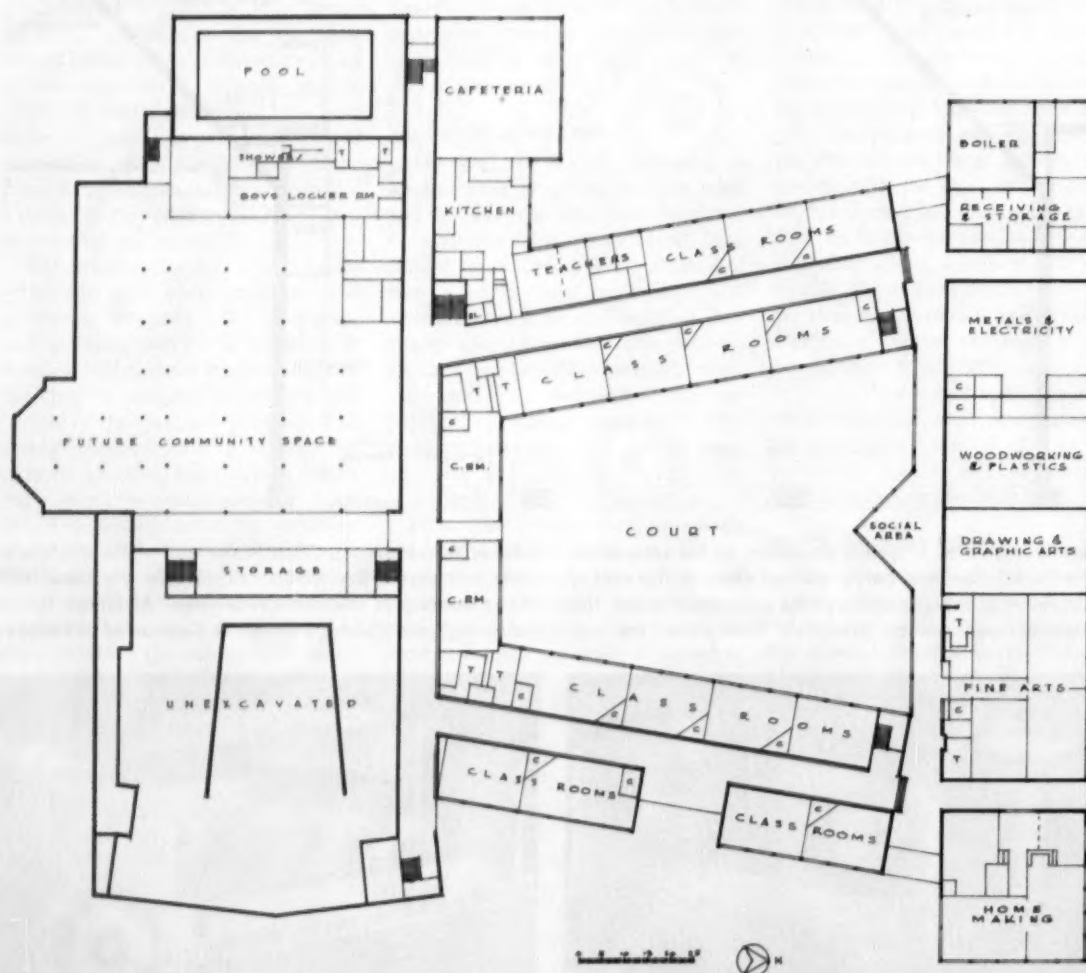


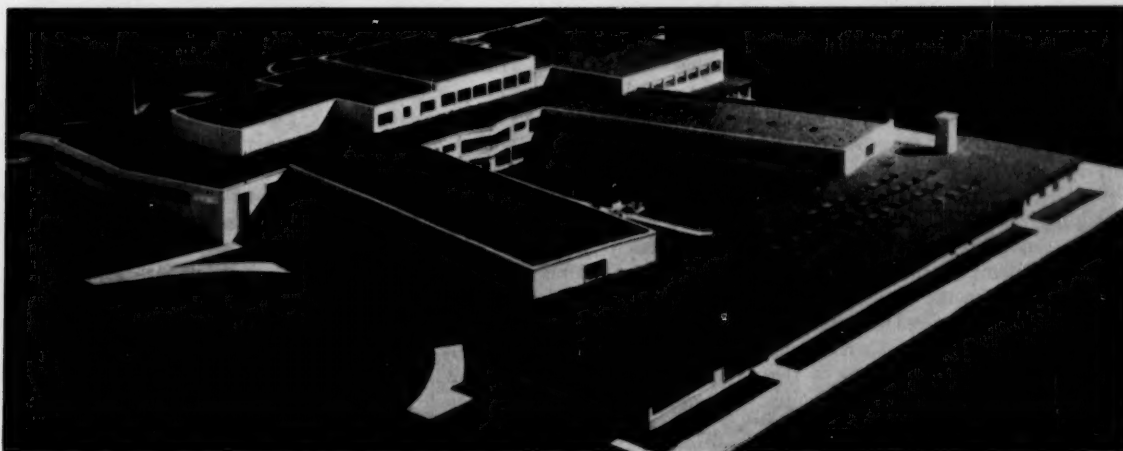


Above is a model of the Longfellow Junior High School, which now is under construction. Note the U shape of the building and the variations in general outline to avoid the monotony of long, straight walls. Below is the school's ground floor plan.

adapted to the level of interest, abilities and aptitudes of the learner. It was clearly evident that a complete reorganization of the existing junior high program was necessary before any attempt should be made to plan a new junior high school building. One of the basic purposes of the

junior high school is to provide for transition between elementary school and senior high school. This means that it should have some of the characteristics of both, with a gradual transition from the program of the elementary school to that of the senior high school, according to our thinking.





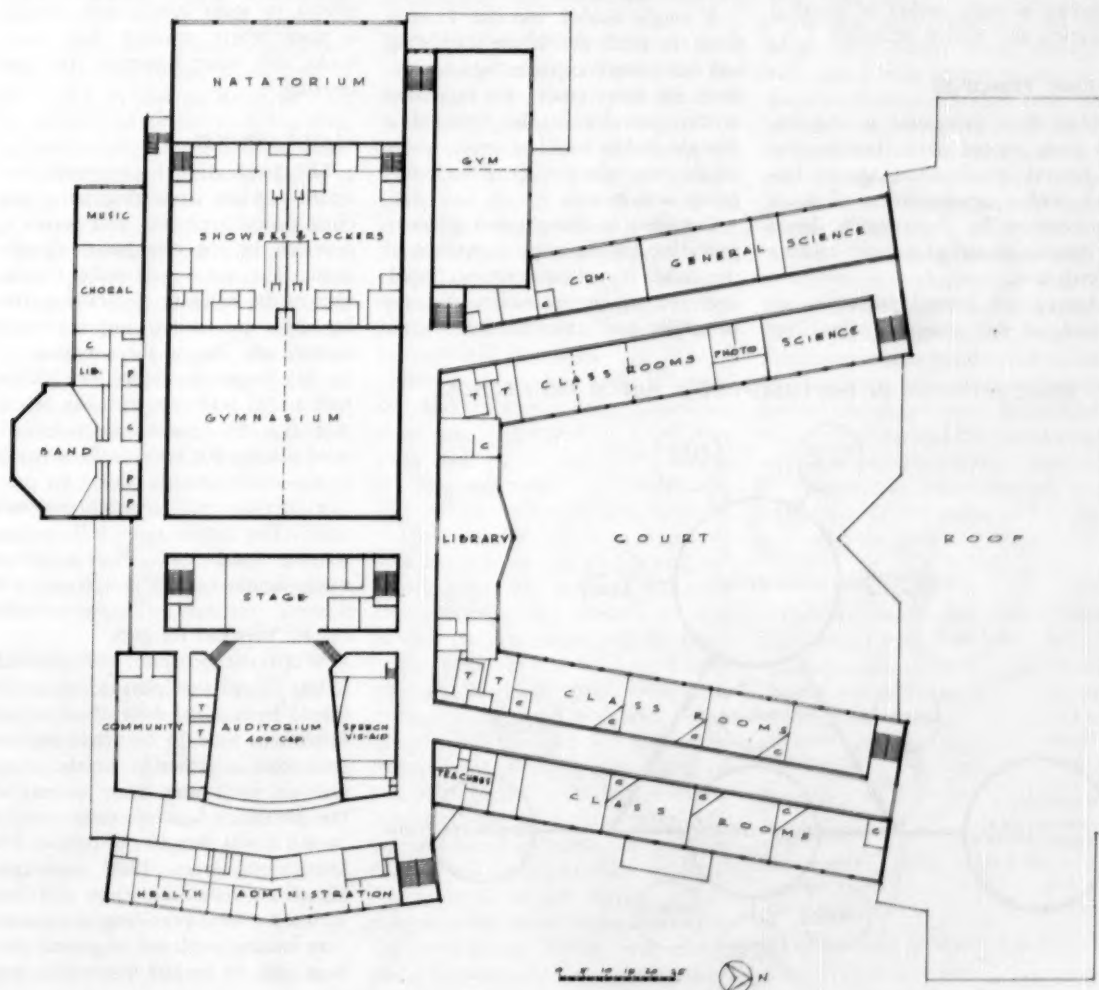
Planning by the staff of 41 members was started early in 1953. The entire group met frequently, and special committees were organized to consider problems relating to subject areas and activities.

Most of the staff members visited at least one new junior high school

building. After a semester of study and consideration, the staff gave unanimous approval to the following general principles:

1. The building should be planned around the growth and developmental needs of boys and girls and should be suited to student living and learn-

Above is another view of a model of Wauwatosa's new junior high school. Below is a plan of the first floor, with the swimming pool, gymnasium and auditorium. A more detailed plan of the health and administration suites (lower left) is on page 79.



ing. Institutional aspects should be avoided. Environment should be friendly and homelike.

2. Children who stay at the school during the lunch period should be required to remain on the school property under supervised control.

3. Useful leisure-time activities should have adequate accommodations in the school building.

4. Classrooms should be self-contained units with the necessary space and equipment arranged to meet the requirements in an atmosphere adaptable to the educational needs of the student. These include: movable seats or tables and chairs, tables and chairs for reading in reference or book corners, adequate bookshelves, cabinet and storage space, bulletin boards and chalkboards, and a conference room.

5. All study activity should take place in classrooms under the direction of the classroom teachers. This eliminated study halls.

6. The normal student program should consist of six classes per day, including a daily period of physical education and related activities.

GUIDING PRINCIPLES

With these principles as a guide, the study moved to a consideration of general specifications, special features, and a determination of space requirements by departments, based on the educational philosophy relating to each area.

Among the general principles approved is the statement that "the

building should be suited to living and learning" and that "useful leisure time activities should have adequate accommodations." Most areas of the building, especially the gymnasium, swimming pool, and auditorium, as well as the art, music and homemaking suites, will serve both the instructional and the recreational needs of the pupils. Other areas have been developed for the primary purpose of providing space for leisure time activities. A community room, 24 feet by 48 feet, with kitchenette, will serve medium sized groups in their more formal club and social activities.

INFORMAL ACTIVITIES

A large area under the gymnasium and music suite will be equipped with a snack bar and soda fountain. There is ample space for game equipment and lounge furniture. Several hundred pupils can be accommodated in most of the informal activities which have great appeal to boys and girls of junior high age.

A single loaded corridor extends along the south side of the shop wing and has a south exposure which overlooks the inner court. An expansion of this corridor in the form of a triangle makes an ideal space where pupils can relax or carry on small group activities.

Considerable thought was given to providing for the physical welfare of the child. Too frequently our buildings and equipment violate the very principles and concepts that we are

teaching in regard to health and safety. Have you tried to get a drink from the average school drinking fountain? Either a dribble of water appears, or water gushes into your face. Unless the fountain has been used extensively in recent minutes, the water is tepid and unpalatable. We decided first to have a generous supply of fountains well distributed about the buildings. The pipe supplying the water is to be large enough to ensure constant pressure, which will give a uniform flow at the fountain head. The problem of fresh, cool water was not so easily solved, because long runs of water pipe cannot be avoided in large buildings. The use of separate refrigerated fountains in business and industrial buildings led us to explore this possibility, with the result that each of our fountains will have a built-in refrigerating unit.

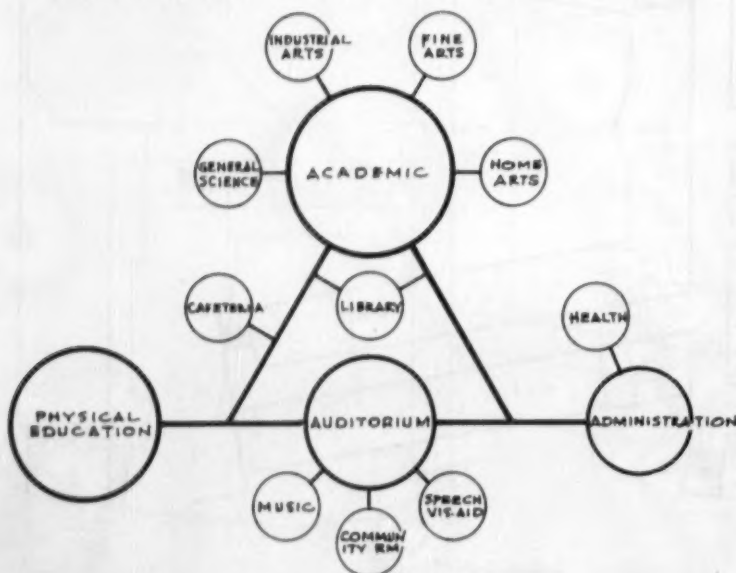
Water closets and toilet partitions will be wall hung to facilitate cleaning. Hot water is to be supplied to all lavatories. Shelves near the entrances to toilet rooms will provide a place where students may leave books and other materials they are carrying.

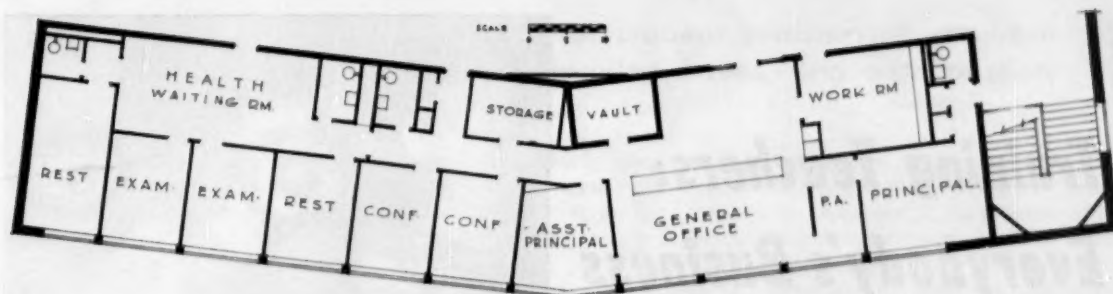
HEALTH SERVICES

The professional personnel for health services, consisting of physicians, dental hygienists, and nurses, is provided by the city health department. The nurse will make a daily visit to the building, generally spending about one hour in inspection and supervision. During the remainder of the day, the responsibility for children who are ill will rest with the school staff. It is this situation which necessitated placing our health suite adjacent to the administrative office. An interior corridor will connect the two units. The health suite will include waiting space, medical examination room, dental examination room, and separate restrooms with toilet facilities for boys and for girls.

When the program was planned, it was agreed that physical education should be required daily of all pupils. Provisions were to be made for instructional activities in health, safety, first aid, and water safety as part of the physical education program. To do this it was necessary to provide five instructional areas. These areas consist of a gymnasium, 90 by 120 feet, with a partition providing two spaces; a swimming pool, and a general purpose area, 40 by 100 feet, which may

SPACE AFFINITIES IN THE LONGFELLOW JUNIOR HIGH SCHOOL





Floor plan of the health and administration suites. See also the first floor plan on page 77.

be divided into two areas. Shower and dressing room facilities will be provided in two areas located between the gymnasium and the swimming pool with direct connections to each. Each area will accommodate two classes and will have two gang showers, two drying areas, two towel rooms, two instructors' rooms, a first-aid room, and storage space.

The floor will be warmed by pipes laid in the floor to keep the area dry and comfortable. Towels will be provided. The student will receive a fresh towel each gymnasium period, which he will return at the end of the period so that no damp or dirty towels will be stored with his gymnasium clothing. Separate shower and locker room space on the ground level will provide facilities for boys' athletic teams.

The swimming pool will be of the deck type, with the water level approximately $\frac{1}{2}$ inch below floor level. Since this pool is planned primarily for instructional purposes, the shallow part of the pool will occupy 40 feet of the total length of 75 feet. The glass block, which forms one side wall of the pool area, will be colored in order to reduce glare and to provide a more pleasing, natural light on the surface of the water. The water will be filtered through diatomaceous earth at a rate that will ensure a complete turnover every six hours.

SCHOOL SITE

The site available for this project was originally 13 acres, located at the northwest corner of North and Wauwatosa avenues. The frontage on these two streets was limited by private property. Initial studies indicated the advisability of acquiring additional properties. This was accomplished, increasing the area to $14\frac{1}{2}$ acres and allowing greater latitude in planning.

The site is located opposite the proposed development of Wauwa-

tosa's civic center. The principal entrance for pupils and public will be at the south end of the building, this being the highest level of the site. The school facilities of community interest will be accordingly located for convenient accessibility. The natatorium, gymnasium, auditorium, community room, and administrative functions will be grouped in this area. Public usage of the areas will be controlled by the use of folding gates at strategic locations.

TWO-STORY BUILDING

Economy in utilization of the site influenced a decision to plan the classroom wings two stories in height. The upper classroom floor will be at the same level as auditorium and gymnasium, and the ground floor will be accessible from the lower grade at the northerly end of the property. The classroom wings will be at an angle, to provide a more open appearance in the court and to facilitate the exits to street and play areas.

Homemaking, fine arts, industrial arts, and the service and maintenance areas will be grouped in a one-story wing adjacent to the north end of the classroom wings. This "shop" unit will lead to the bus loading driveway.

The cafeteria will have a ground floor location near the playground and it will adjoin the physical education area. Music instructional areas will be near the gymnasium and the stage.

The structure will be framed with structural steel and steel joists, with the exception of the shop area, where concrete will be used for roof slabs. Exterior walls will be constructed of face brick backed with concrete block. Acoustical tile of various types will be used in all principal areas. Floor finishes will be asphalt tile in classrooms; wood in the physical education areas and shops; vinyl asbestos in the auditorium, library and music areas; ceramic tile in toilet, shower

and dressing rooms. The gymnasium, corridors and shower and locker rooms will have facing tile wainscots.

Windows have been designed for directional glass block to provide suitable daylighting for the 26 foot classroom width. Glass block skylights will be used in the corridors of the upper floor and to provide additional daylighting in the industrial arts, fine arts, and homemaking areas. Vision strip windows and other windows will have aluminum sash.

Package type automatic oil fired boilers will deliver steam through a loop distribution system to unit ventilators in classrooms and to other heating and ventilating units. Steam will be converted to hot water heating for domestic hot water and for radiant panels in the natatorium and locker-shower floors.

The electrical distribution will be by means of a three-phase four-wire system for flexibility and economy of installation. Recessed low brightness fluorescent troffer fixtures will be used in classrooms, and surface mounted fixtures in shop areas. Incandescent fixtures are specified for corridors and service areas; underwater lights will be provided in the swimming pool. Program bells and clocks will be electronically controlled.

CONSTRUCTION COSTS

Bid costs for the Longfellow Junior High School were as follows:

General construction.....	\$1,895,000
Heating and ventilating.....	230,508
Plumbing	178,849
Electrical	196,937
Elevator	7,600
TOTAL	\$2,508,894

Total area.....	191,200 sq. ft.
Total volume.....	3,000,000 cu. ft.
Cost per sq. ft.....	\$13.15
Cost per cu. ft.....	\$ 0.84

The building is expected to be completed by Jan. 1, 1956.

Training Teachers: Everybody's Business

CLYDE MARTIN

Assistant Professor of Elementary Education
University of Texas

RICHARD K. BOWLES

Principal, Brentwood Elementary School
Austin, Tex.



Student teacher accepts Junior Red Cross responsibilities.

THE parents in one of our neighborhood elementary schools here in Austin, Tex., are taking an active part in the process of educating student teachers. And student teachers are playing an active rôle in community affairs.

Those who planned the project believe that if young people really know the rank and file of school patrons they will find them to be sincere and helpful friends. Instead of fearing parents, student teachers will come to appreciate them and to view them as interested helpers in the common enterprise of educating today's children.

STUDENTS ON FIRING LINE

The Brentwood Elementary School—principal, staff and parents—provided the setting in which 13 student teachers from the University of Texas learned the meaning of effective teaching in a public elementary school. How these students lived on the firing line—in a real community faced with real problems—is a story of a variety of contacts between students and the people in that community.

Persons responsible for the guidance of student teachers in the University of Texas believe that a fine experience results when a corps of students forms a "junior faculty" within the regular faculty of a public school.

This situation can exist only when the staff of the school brings it into reality. The principal of Brentwood School provided a fundamental step in the process by working with student teachers in the same way in which he worked with regular teachers, only at different times.

Each Wednesday morning the principal met with the junior faculty to discuss such topics as: the Brentwood community, coordinated services of Austin Public Schools, what public schools expect of teachers, and similar topics. One period was spent in showing student teachers how to operate the school's special kind of temperamental movie projector!

The same principal arranged for students to work with parents and teachers, obtained materials and, on one occasion, brought a jar of stunning looking insects that were needed by a teacher in the third grade. Acceptance of, and work with, these young people by the head of the school gave them a feeling of belonging to, and being responsible for, the entire program for children.

To fit together comfortably six hours of school living with 18 hours of home living has to be a part of the education of today's teacher. Brentwood patrons provided the parent contacts that prospective teachers needed.

Such movies as "Families First" and "Developmental Characteristics of Pre-Adolescents" were prepared by students, shown to parents, and followed by discussions. Parents provided real evidence about the growth characteristics of boys and girls in the school. They gave meaning to much that students had read about family relationships in courses in child development. The discussions were recorded and used in university seminars with students. Parents were told that they were helping to educate teachers and seemed delighted to be a part of the job. Members of the junior faculty had met these parents earlier in the semester at "grade level" meetings. When parents arrived for the movies, student teachers were able to greet some of them by name.

Regular faculty members were tireless in their efforts to guide junior members. They participated in group meetings with students and college supervisors and in scheduled individual conferences with students and, in countless ways, guided class work.

PARENTS IN THE PICTURE

Many of the experiences that student and classroom teachers planned with children involved the help of parents and utilized many of the resources of the community. In a large

The story of a "junior faculty" of student teachers, their work with the regular staff, in community drives, and with parents

elementary school it often seems to be impossible to provide all of the concrete experiences that are necessary in the learning of young children. Instead of trying to take an entire group on an excursion, students asked parents to accompany their own children, plus a playmate or two perhaps! They asked parents of 7 year olds to take them to a supermarket, giving carefully planned instructions about significant things that should be pointed out. Parents of 8 year olds, upon request, took the children to a museum to see an Indian exhibit. Later these parents participated in the classroom group when the excursions were discussed.

During Book Week student teachers sent home lists of significant books for children and requested that parents accompany youngsters on a visit to the public library. One parent reported that there was little rest in the household until the visit had been made, the books located and shared in the family.

Parents have often been invited to assist in activities with children at school. At other times they make appreciative audiences! A student teacher of 6 year olds took them to visit a classmate whose parents own a farm on which they raise pigs and chickens and parakeets. Several parents went

along. Pictures made after the trip convinced both parents and student teachers that children do fine creative work after rich, concrete experiences. A student teacher and her fifth grade pupils summarized a health unit by displaying pictures and written materials on a large "three dimensional" bulletin board. Committees of children explained the work to parents and to pupils from lower grades. A group of 7 year olds drew pictures after visits to a grocery store. They told about their pictures and their stories were recorded on tape. Pictures and stories were made into a "television show," which was later shown to parents. Parents of another group of 7 year olds helped to construct instruments for a rhythm band. In a second grade group, a mother came to school and helped to bake rolls.

STUDENT GETS REAL WORKOUT

On the eve of the annual Junior Red Cross drive, the regular teacher who was its sponsor was called out of town for several days because of an emergency. The school depended upon her student teacher to coordinate the drive in all 28 classes. The local chapter of the American Red Cross asked her to participate in a citywide publicity project. This, and completion of the drive to the point of turning over

to the local chapter the money collected, provided this student teacher an experience in cooperation with a community organization. This student also helped pupils in the exchange of material with classes in another part of the nation.

F.T.A. GROUP PAYS VISIT

Members of the Future Teachers Association from one of the high schools in the city recently visited Brentwood to see how teaching is done in an elementary school. In many classrooms they were greeted by a student teacher from the university, who demonstrated some of the ways of working with children.

It seems reasonable to assume that the wave of criticism that has fallen upon teachers and schools generally today might deter young people from going into teaching. To them the task of pleasing parents and other citizens might seem insurmountable. However, when parents through their contacts with students understand a bit of what constitutes the education of a teacher, surely there may be increased understanding of and appreciation for teachers. Student teachers learn that parents are usually sincere, earnest persons who seek only the best for children and that mistrust arises from misunderstanding.

After parents watch film on child development, student teachers discuss film's fine points with them.



This high school has developed

Three Technics for Bettering School-Community Relations

JAMES J. JONES

Assistant Professor of Educational Administration
Arizona State College, Tempe

NO PATENTS are pending on the inventive ideas of Principal John Tanner and his staff at Phoenix Camelback High School, Phoenix, Ariz., so some of their ideas can be passed along.

Several novel notions introduced by Mr. Tanner and selected faculty members are working out so well in that school community that it appears they might be applied with success in other localities. No doubt these technics are spreading throughout the Phoenix school system, for Mr. Tanner is liaison officer between the high school and its community and between the central school office and the larger community.

One of the school's most recent practices is inviting five parents to visit school each day. The purposes of parent visits are: (1) to familiar-

ize parents with the personnel, plant, curriculum and activities available; (2) to provide teachers with opportunities to discuss student problems with them; (3) to give students a chance to acquaint parents with the school environment; (4) to help parents get information about school problems; (5) to assist parents to regard school visits as part of their normal activity, and (6) to educate students to the fact that parents should take an active part in planning school activities.

Parents are chosen from an alphabetical list of all parents of the particular attendance unit. They are asked

to arrive at school by 10 a.m. and to stay as long as they desire. Upon arrival, they get a copy of their child's daily activities along with a complete school schedule. They then visit any part of the school program they wish.

The visitors are encouraged to eat in the school lunchroom and to cover the entire campus. Before leaving, they are asked to visit with the principal so that they may raise questions about what they have observed. The principal may, in turn, ask them for their evaluation of activities they have witnessed during the day.

Although this practice has been in effect only a short time, school officials,

These three Phoenix Camelback High School students (left) are taking part in a pompon (cheerleader) rehearsal. At right are Mrs. Leslie Artz and Mrs. A. F. Baird, parents, and Mary Boots Watts, vice president of the student body, who is conducting the two women on a tour of the school.



**Five parents a day visit the Phoenix
Camelback High School
Husband and wife serve as
P.T.A. officers
Parents sponsor school groups
along with teachers**



Mrs. Baird and Mrs. Artz also visited various classrooms during their tour of the high school. Standing is Jack Raymond, instructor in journalism and English. The two mothers are following the material in the textbook that the teacher is presenting to the boys and girls in his class.

teachers, pupils and parents feel that it is a wonderful innovation.

The parent-teacher association is organized on a basis peculiar to this school. The organization has two presidents, a husband and wife combination. First and second vice presidents are also husband and wife teams. The P.T.A. has for its theme this year "Improving School-Home-Community Relations Through Information."

An example of how this unit educates parents and teachers about the school may be illustrated by a recent school function. Various scenes in regard to a recent football game had been prepared for presentation on the opaque projector. Figures and

tables shown gave parents and teachers an idea of what football costs in time, effort, money and preparation. Information was shown about the Arizona Interscholastic Association and the cost of coaches, officials, band director, transportation, equipment and insurance. The school publications department explained the use and value of before and after game write-ups. The audio-visual department showed how the public address system is set up before each game and how the student who broadcasts the games is getting training as a sports announcer. The band director explained the band schedules, marches and preparation necessary for the half-time ceremony.



Bill Baird points out to his mother, a visitor to his class, an important passage in the textbook. When parents arrive at the school they are given a list of their child's daily activities and a copy of the school schedule. They attend any part of the school's program in which they have a particular interest.

The "pompon girls," or cheerleaders, gave data on their hours of work, cost of uniforms, and the origin of the various dances performed at the game. Coaches explained some football plays and demonstrated the protective equipment now being used. The training, employment and cost of officials were discussed. These facts and figures were well accepted.

Usually the term a "sponsor" means a teacher who accepts responsibility for some particular phase of the extracurricular activity program. He is the adviser of a club, committee, staff or other group, responsible for its organization, administration and promotion. His chief contributions are experience, judgment and enthusiasm.

PARENT SPONSORS FOR CLUBS

At Camelback High School a program was begun last year in which each club has not only a teacher sponsor but also a parent sponsor. After the teacher sponsor has been selected, club and teacher together elect a parent sponsor.

An example of this is the skating club, which has both a teacher and parent sponsor. Both students and the teacher sponsor find the parent a most welcome addition. Parent sponsors are, of course, chosen on the basis of their interest, ability and availability.

CHALK DUST

Frederic G. Johnson



APRIL

HERE NOW IS THE MIRACLE! Over the brown and sodden woodland and meadow, there creeps a tinge of color as the littlest flowers send forth exploratory promises of glory to come. This is the time when the school administrator finds his greatest satisfaction—not because of that clever speech he made at Rotary, not because of the illumined scroll awarded him for civic leadership, not even because of the news that, at long last, he has been appointed to the steering committee for the Cleveland convention. Rather, the satisfaction lies in a visit to the kindergarten or a discussion with his student council or just a casual conversation with a senior student who only yesterday entered the first grade. This is springtime for a superintendent of schools.

IS YOUR EAR GROUNDED?

A PUBLIC RELATIONS EXPERT in Boston, of all places, has just published an article in praise of the public opinion poll. He asserts that by frequent and judicious use of this pernicious technic, a school administrator can change his patched curriculum in public or even get a new building before the old one collapses. Older and wiser school superintendents may disagree with this enthusiasm.

Contrary to public opinion, the public opinion poll is not a new technic. It is only a hopped-up version of the old-fashioned letters-to-the-editor which Mrs. Busty clips from the local newspaper and anonymously sends to the superintendent's wife. It had its beginning in the party-line telephone when folks kept informed on the progress of neighborhood downs and ups without bothering to read. It is true that George and Elmo tried to scientize the opinionnaire but even they sometimes fell flat on their faces, particularly that time when you lost a \$10 bet

on the Republican Party! The public opinion poll may be all right for an automobile designer, but for the school administrator it can only bring sleepless nights and worry-as-usual.

In the first place, the public opinion poll is inaccurate. A few years ago they took an opinion about the birth rate and virtually everyone agreed that by 1955 it would level down (or plateau, as they say in educational circles). Economy minded superintendents fired their school architects and sold the building plans to richer districts. What happened? You know what happened, brother! That poll just gave people ideas, and you are on double sessions.

Second, the public opinion polls never get to the heart of the matter. If a school superintendent really wants to know what people think of him or his dog or his wife's hat or the way he behaved at the party last night, he doesn't have to pay George or Elmo to find out. All he needs to do is ask his wife on her return from the afternoon canasta.

Finally, the public opinion poll takers say that 8 per cent of the people never have any opinion whatsoever, and they judge their findings on that statistic. Superintendents have never met these fine, upstanding, agreeable eight percenters. In the average district, at least 100 per cent of the people have vociferous opinions, which are usually not what you wanted either.

I hope, Mr. Editor, that this opinion will give you pause before you publish any more opinion polls and keep me and my board of education upset until 3 a.m.

LOOK WHO'S HERE

The Jewelry Salesman

A BILL has recently been introduced in the New York State Legislature that permits the sale of graduation albums, class rings, and other insignia during school hours, with the consent

and under the direction of the principal. Presumably this is an attempt to make an honest man out of the principal after all his uneasy years of consorting with the various salesmen of graduation gewgaws.

In America, no high school graduating class is complete without rings, class pins, gardenias and a \$5 check from Uncle Clarence, the old piker! Thus, when the Ring Man arrives at school with a dazzling display of the latest models, there is always that touchy moment when the principal debates whether to throw him out or to grab his sparklers and forthwith start out as a salesman himself. But reason triumphs, and, public relations being as confused as they are, the Ring Man is heartily welcomed, as the lesson plans and more mundane salesmen are given the bum's rush.

After much bickering and community feuding, the class decides upon an appropriate emblem in memory of its coming triumph. Ordinarily the youngsters pick an inconspicuous little number which will impoverish their parents for years to come. Only then is it discovered that the preliminary arrangements for a commission for the local jewelers' association is vague and unsatisfactory, and in the confusion the price of the ring is doubled to cover good will, cost of free meals for the selection committee (and one may hope a free meal for the principal, mayn't one?), and other unimportant details.

Following the selection of the rings, there is a long delay and much correspondence on the part of the principal, but at last the emblems of class solidarity arrive C.O.D., and the principal signs a three-month note with the local bank to get the rings out of hock. Trusting fellows, these jewelers, huh?

The collection of money for the rings devolves upon Our Hero, for it is now June, and the class, as an entity, has wandered afar, leaving this and many similar small financial details unsettled. But school principals are quite accustomed to these trivia and will be rewarded later when alumni return from college nostalgically saying, "Prof, you remember that class ring you gave me? They made me swallow it at my fraternity initiation and buy a tie instead."

Truly, there ought to be a law!

IT IS axiomatic that public education should be conducted in the public interest.

There are tough questions to be answered in determining what is in the public interest and in deciding whether our present agencies of public education are serving the public interest.

Who determines what is in the public interest? What are we doing in public education that serves the public interest? What are we doing that runs counter to it?

Perhaps we can get clues regarding the purposes public education should serve by examining the reasons for establishing it in the United States. From 1820 to 1840, when the great debate regarding the establishment of a public school system went on, the three most compelling reasons for its establishment appear to have been:

1. To hold together a loosely bound nation that had recently attained its independence and might easily lose it unless more internal cohesion was achieved.

2. To help in preparing a special kind of citizen for a special kind of country.

3. To help every American to become all that he may become.

How do we determine the public interest in public education?

Here theory and practice seem to have gone in opposite directions. Theoretically, the public or its adequate representatives decide. Actually, minority groups (lay and professional) make most of the decisions.

The agencies set up to make the decisions are local boards of education, state legislatures, state boards of education, and the national congress.

Repeated studies have shown the *unrepresentative* character of local boards of education. There has been ample evidence in recent years that many individuals and groups do not believe that their boards of education represent them. Without adequate representation of the public, democracy lapses into autocracy, oligarchy or anarchy.

It has been estimated that only 20 per cent of the school systems of the country have even attempted to develop organized, official policies. The best policy statements available do not answer satisfactorily the questions

In last month's issue, Dr. Hamlin discussed the question, "Are We Returning to Private Education?" This article is the second and final one of the series.

Let's Conduct Education in the Public Interest

H. M. HAMLIN

Chairman, Division of Agricultural Education
College of Education, University of Illinois

Are these children being educated in the public interest? Or are professional educators and lay citizens, including our "unrepresentative" local school boards, engaged in defining the public interest to suit themselves?



Chicago Public Schools

about public education that the public or its representatives are expected to answer:

1. What is to be the process of policy making? Who is to participate? How?

2. What is expected of the schools?

3. Whom are the schools to serve? How are the schools to serve the various elements within the public?

4. How is the public to determine whether the purposes and the clientele it has designated are being adequately served?

5. What are the major ways and means the public must provide if the schools are to do what they are expected to do?

The policy statements we have were often written by school administrators, approved routinely by boards, and filed. The official enactment of policies takes only a few minutes, but it may take months or years to develop policies. The participation of representative citizens and teachers, as well as board members and administrators, is required if policies are to be adequately developed. Once policies are developed and enacted, the same groups must share in reviewing and revising them. Policy making is a continuous process.

The policies of a public school system should be known to all. At present only a small minority of the public knows the policies guiding the public schools even when there are guiding policies.

At the state level the provisions for public participation in determining the public interest in education are even less adequate. Here minority groups, lay and professional, vie for control over the schools. An uneasy balance of power among them is sometimes achieved, but the public is seldom able to indicate adequately its interest in public education.

NO NATIONAL POLICY

The situation at the national level is worst of all. We have no national policy toward education that reflects the public will. In the absence of an integrating policy, some 275 separate federal programs of education have been established in about 200 agencies of the federal government, nearly all of them unrelated to the public school systems of the states and communities.

How well is public education serving the public interest?

We can only guess, since the pub-

lic interest in education has never been adequately defined by the public or its representatives.

It seems fairly obvious, however, that public education is not serving the public interest when it is confined to a part of the population or when it gives highly preferential treatment to certain elements in the population. There are examples galore of both, the most notable one being the exclusion of adults from most of the public schools of the nation.

Many schools still discriminate on the basis of race, nationality, social class, and parental occupation. Those in charge of these schools are so accustomed to these discriminations that they may not realize that they are making them.

We can be reasonably sure that public education is not serving the public interest when it is unrelated to the life-and-death concerns of communities, states, the nation, and the world. Our trespasses in this respect are manifold.

ARE SPECIAL INTERESTS SERVED?

Many schools fail to aid in community development; some probably contribute to community deterioration. When programs of community improvement are undertaken, it is seldom expected that the schools will contribute very much to them. The sad condition of the state governments, reported by Richard L. Neuberger* and others, is no tribute to the state school systems. Public education has not been an adequate deterrent to the development of a "mess" in state-federal relations or an adequate aid in improving national affairs. Though our very existence depends upon our international relations, many schools are lethargic about them, and some are forbidden really to teach about them.

We are not serving the public interest when we ally public education with particular groups and, consequently, emphasize their interests overtly or by the neglect of other interests. It takes little searching to find examples.

A committee on economic education advisory to a public school includes 17 corporation presidents, a laboring man, and a farmer. A board of education with a citizens committee of 100 to work on a bond issue

*Neuberger, Richard L.: *Adventures in Politics*, New York, Oxford University Press, 1954, Chap. 1.

found, after losing the issue, 8 to 1, that only downtown business and professional men had been included in its "representative" committee. In one college it was impossible for years for teachers of home economics to include oleomargarine in their recipes. A Wisconsin high school band was sent to a McCarthy rally in New York City.

We prevent a proper expression of the public interest when small groups associated with the schools design policies and programs and then attempt to sell them to the public, instead of asking the public to share in developing them.

Until recently this has been common school practice. Many school people are still talking about "interpreting" or "selling" the schools to the public and are interested in any method of obtaining public understanding of the schools *short* of allowing the public to participate in the vital decisions about them.

We defeat the public interest when we cater to the private interests of students and their parents without determining whether the public believes these interests to be in line with the *public* interest.

CAN'T PROVIDE EVERYTHING

Children and their parents want much that the public may not care to provide and should not provide. A public school is not a "finishing school" or one that prepares for a finishing school. It is not conducted to make it possible for a few students to attain distinction in baton twirling, oil painting, or dancing. It is not a school that sanctifies the social distinctions some parents make.

This article is not intended to delineate the public interest in public education. Too many other individuals and too many groups have already indicated that they think they know what it is. It is as easy for professional groups and minority lay groups to believe that what is good for them is good for the public as it was for a secretary of defense to believe that what is good for an automobile manufacturer is good for the country. All of us engage in that kind of thinking, though we profess abhorrence of it when others do it.

This article is intended only to alert professional workers and lay citizens to the ever-present danger of neglecting the public interest or of defining it to suit ourselves.

Assigning and Evaluating the Substitute Teacher

ROBERT WILLIAM MacVITTIE

*Professor of Elementary School Administration
and Principal of Campus School
State University of New York College of Teachers, Buffalo*

WAYS to improve the recruitment of substitute teachers were developed in a previous article, and an orientation plan was suggested.* But plans for improving the substitute teacher's service will be only as effective as the understanding of this need by the entire school personnel. Once a group of substitute teachers is recruited and the orientation program is launched, the next considerations are: (1) assignment for service and (2) evaluation.

The substitute teacher needs to be made at home in his own particular building or in those buildings in which he is likely to teach. In each building a faculty committee can help the substitute teacher feel welcome and needed. He needs to know the general layout of the building and the locations of rooms that will be related to his teaching services.

Sometimes it is a helpful practice to designate one teacher as a "neighbor" upon whom the substitute can call for assistance.

While a substitute teacher should accept all the efforts that are made to help him, this should not be a passive acceptance but rather a willingness to be helped and a desire to serve well.

Three real obstacles could stymie the orientation program: (1) the reluctance of some personnel, including substitutes, to recognize the need for orientation; (2) the regulation of the time required to carry out the program, and (3) the payment or non-payment of the substitutes who attend the orientation sessions, exclusive of the social meetings.

It cannot be assumed that the regular teachers will understand the advantages of or need for an orientation program, especially since many think that the substitute is required to do



Substitute teachers need to visit classrooms to renew their acquaintance with subjects and to learn what classroom instruction is like today.

no more than "keep house" while the regular teacher is absent. Teachers who think this way need to be aided to gain new insight into the problem, as well as to become willing to effect changes in the rôle of the substitute teacher. Simply because nothing has been done in the past is no reason a change toward improvement cannot be attempted.

Each community will have to answer these questions in view of its own peculiar needs. It can be attempted on as small or as large a scale as the system feels is needed. It need not be done every year, especially once a corps of trained substitutes is available. Any part of the program can be undertaken; the adaptation is up to each school system and/or building.

Any school system that can afford to pay substitutes to attend orientation meetings should do so, but lack of financial ability to do this should not stop such a program. Partial payment or even providing lunch is a help.

When the requirements of the substitute's service in terms of days needed, as well as the potential decrease in possible problems evolving from poor quality substitute service are considered, it would seem to be good business to pay the part-time substitutes during the orientation program. The potential increase in the assistance given the substitutes, as well as the real attempt to raise their status, should make many substitutes amenable to sincere suggestions in regard to financial adjustments during orientation.

Pupils, too, have a share in this program, since they are the ones who are the center of the teaching service and around whom the program revolves. Specific attention to helping children accept the substitute as a necessary person should be attempted. Teachers can work with children to help them to see the need for the substitute, as well as the need to help him feel at home. Room duty committees that go

*MacVittie, R. W.: Professional Program for the Substitute Teacher, *Nation's Schools*, 55:83 (March) 1955.

on with their duties when a substitute is there will help. Having a room chairman who introduces the class to the substitute, as well as assisting the substitute in general, is good practice. A capable substitute will need to know how to earn the respect of the children and to utilize their assistance.

Obviously, the practices used to assign substitutes should be those that can ensure the best possible use of qualified and oriented substitute teachers. These practices should take into consideration preservice preparation and certification for the grade and/or subject area of assignment and equal distribution of the job opportunities among the substitutes available.

A widely accepted practice is that of having building principals assign substitute teachers for service, although the superintendent's office does its share. It has been suggested that the principal decide who should be called; principals tend to call those who have given good service. Another practice is to rotate the job opportunities, so as to ensure equalization of work opportunities. In this way more have a chance to serve and to remain interested in professional service, thus widening the base for this important service.

Substitute teachers usually are allowed to limit their service to the age or grade level of children they prefer. Sometimes, because of certification or part-time employment or lack of transportation, they are limited to certain subjects, grades or schools. A few communities permit substitutes to take over the duties of teachers of their choice only. This certainly lessens the usefulness of substitutes.

One person—the superintendent, the superintendent's clerk, or a principal—should be responsible for assignments.

This person can prevent duplication of calls to the same substitute and permit a regular rotation of substituting opportunities. The substitute list or file should always be kept up to date. Substitutes who are called in order may still be permitted to refuse an assignment when it is their turn, yet they must understand that the rotation will be continued until their turn comes again.

Rotation of opportunities helps keep all substitutes alert and ready to serve. Little is gained from professional recruitment and orientation if only certain substitutes are called. If a bulletin to substitutes is issued, it is good practice to inform them of the days served by each substitute so that they can see that a fair and equal opportunity is given to all.

The evaluation of the substitute teacher service is necessary to the successful rounding out of this service. After substitutes are recruited, oriented and assigned, they should be helped to take stock of the service they render. Administrators, regular teachers, and substitute teachers should be encouraged to develop their own criteria, since the service can be evaluated only in the light of agreed upon goals.

CRITERIA FOR RATING SUBSTITUTES

The evaluation should involve administrators, regular teachers, and substitute teachers. It should be written and should be as objective as possible. A check list can be used, if it has been cooperatively made. I suggest that the check list be printed on a 3 by 5 inch card. Methods of evaluating need to be uniform throughout the system and should be as simple to use as possible. The areas to be considered in evaluation of the substitute's service will be peculiar to the school system situation.

A simple three or four point scale will indicate degree of recognition of the agreed upon criteria. Substitutes may be marked *outstanding*, *satisfactory*, *acceptable* and *unsatisfactory*; with the last named rating the reasons should be given as part of the evaluation. Regular teachers can contribute, too, once they have had a chance to examine the plans or notes left, as these serve as evidence of the work done.

The classroom teaching of the substitute should be observed when the substitute service continues over a period of three days or more. The observation should be made in a friendly and democratic way after the intention to visit has been announced to the substitute. The visit need be only five minutes long, or longer if the technic appears effective. The technics used in evaluating regular teacher service are valid, but it is necessary to consider elements peculiar to substitute teacher service, such as the temporary nature of the service and limited opportunities to work with the same group.

WILL NEVER BE EASY

I advocate the professionalizing of substitute teacher service. It must be remembered, however, that per diem substitute teachers are retained only through the expression of their intention to serve. They are not paid unless they serve. The desire for the professional status of substitute teachers must be mutual on the part of substitute teacher and school officials. This will need to be recognized if school systems are to give attention to the improvement of the substitute teacher service, especially if they are to require improved service from the substitute teacher and if they are to request substitute teachers to invest some of their own time toward self-improvement.

The duration of the period of substituting cannot always be known at the beginning of the period of service. Hence, it is required that our day-to-day substitute service be professionalized to the extent that the substitute teacher can assume the teaching responsibilities of regular teachers with no real or apparent loss of educational opportunities to children or the school system.

It is naïve to suppose that substitute teaching will ever become easy, but the work can be made much pleasanter and a greater contributive link in the chain of the educational program than it has often been in the past.



A handbook of general information will help substitute teachers to become acquainted with the overall program of the schools in which they will work.

**The President's program arouses question
of constitutionality of the**

State School Building Authority

LEE O. GARBER

Associate Professor of Education, University of Pennsylvania

PRESIDENT EISENHOWER'S recent message to Congress in which he outlined a program for meeting school building needs stimulates interest in what may be termed "the school building authority or agency method of financing school construction." Some time ago I devoted two articles to this subject. In one I considered the legal aspects of the school building authority as it exists under the statutes of Pennsylvania.¹ In the other I considered cases growing out of similar laws in other states: Kentucky, Georgia and Indiana.²

The most recent case dealing with this subject was decided by the Supreme Court of Wisconsin last October.³

For some time Wisconsin has had a statute authorizing school districts to lease school property to nonprofit building corporations. The law also authorizes these corporations, which are empowered to construct school buildings, to re-lease such improvements, in turn, to the districts from which the property was originally leased for terms not to exceed 20 years. Recently an action was brought to test the constitutionality of this law.

This action was brought by a school director to compel the clerk of the school district to sign the lease and re-lease agreements provided for in the law. The defendant clerk based his refusal to sign them upon his contention that the law was unconstitutional, in that it was in violation of Sec. 3, Article XI of the Wisconsin constitution, which reads, in part, as follows:



"No . . . school district . . . shall be allowed to become indebted in any manner or for any purpose to any amount, including existing indebtedness, in the aggregate exceeding 5 per centum on the value of the taxable property therein, to be ascertained by the last assessment for state and county taxes previous to the incurring of such indebtedness. . . . Any . . . school district . . . incurring any indebtedness as aforesaid shall, before or at the time of doing so, provide for the collection of a direct annual tax sufficient to pay . . . and discharge the principal thereof within 20 years from the time of contracting the same."

The school district in this case—Joint School District No. 3 of the village of Centuria and the towns of St. Croix Falls, Balsam Lake and Eureka, all in Polk County, Wisconsin—maintained a school at Centuria. As a result of increasing enrollment, the building became inadequate, and an addition was needed. The school board prepared plans and specifications for the needed addition, which were approved at a special meeting of the voters of the district. Later, at a special election, the voters authorized the board to issue bonds for the purpose of financing the cost of erecting and equipping the addition.

The lowest bid for constructing the addition was \$127,775. At that time the total value of the taxable property of the district, as determined by the last assessment for state and county

purposes, was \$975,247. Based upon this figure, the maximum amount of indebtedness, under the statute (5 per cent), was \$48,762.35.

When the board discovered that it could not finance the addition through the issuance of bonds, it decided to take advantage of the law previously mentioned. It formed the Centuria Building Co., Inc., a nonprofit corporation. Members of the corporation were the school board members, and its officers were the school officers. It had no assets and no property, except its interest under the lease and re-lease agreements.

In order to obtain the money needed to construct the addition to the school building, the corporation arranged to sell first mortgage serial bonds in the amount of \$130,000. These were to be secured by a mortgage and a trust deed upon the leasehold interest which the corporation had. Under the lease arrangement between the school district and the building company, the board agreed to lease a portion of the school premises to the company. Under the re-lease arrangement, the board agreed to lease from the company the building to be constructed for a term of 20 years at an annual rental of \$5500 for the school year 1954-55 and \$9600 for each succeeding year. It also agreed to levy an annual tax sufficient in amount to meet the rental payments, to maintain the premises, to keep them insured, to pay any taxes that might be levied against the property, to assume all liability and obligations on account of any and all damages, and to indemnify and save harmless the company. The board also agreed to give the company a lien on all goods, chattels, fixtures and personal property of the district that would be placed in the new addition.

After the board and the company had agreed upon the terms of the lease and re-lease agreements, a special

¹Garber, L. O., *The Question of State School Building Authorities*, *Nation's Schools*, 52:67-68 (August) 1953.

²Garber, L. O., *Predicts Public Reaction to School Building Authorities*, *Nation's Schools*, 52:83-84 (September) 1953.

³*State ex rel. Rogers v. Milligan*, 66 N.W. (2d) 326, 267 Wis. 549.

meeting of the voters of the district approved the agreements by a vote of 82 to 6.

In spite of this, the district clerk refused to sign the agreements. No claim was made that the rentals agreed upon were in excess of the fair and reasonable rental value. Likewise, no claim was made as to the irregularity of any of the steps taken in terms of the provisions of the statute. It appears to have been conceded that the life of the building was in excess of the rental period. The only point in controversy was the constitutionality of the statute.

RULING IN WISCONSIN CASE

In a previous decision, rendered in the summer of 1954, the Wisconsin supreme court had held that a somewhat similar agreement involving the construction of a state office building was made under an unconstitutional statute. (*Thomson v. Giessel*, 65 N.W. [2d] 529.) In that case the mortgage leasehold covered an existing state office building. In this case the mortgage leasehold covered only a vacant lot. Nevertheless, the court followed the same line of reasoning it had followed in the state office building case and held the law unconstitutional. Concerning the former case, it said: "We must follow the law as stated in the state office building case and hold that the plan followed by the district creates a lien on its property, and that in consequence thereof an indebtedness exceeding that permitted under Sec. 3, Article XI of the Wisconsin constitution has resulted."

In justifying this position, it reasoned that the lease, the re-lease, and the mortgage of the leasehold interest constituted one transaction. "The net result is that because of the mortgage there is the possibility of the district's being deprived of the use of its land during the remaining term of the lease if it defaults in the payment of the rent." Concerning its interpretation of the law, in terms of the meaning of the constitutional provision invoked, the court said:

"The limiting of the amount of the indebtedness which may be imposed upon a community is a rule which public opinion at the time of the writing of the constitution required to be written into that instrument. It was the purpose to fix limitations with respect to liabilities within which the representatives of the people were to conduct the government. It was not

the intention of the writers of our constitution to finally end things in a definite and static state bound to then-existing conditions, but it is apparent that if the people are the authority over the constitution, we are bound, when moving from one basic plan to another, to move in that direction through the deliberate and thoughtful processes of constitutional amendment. It follows that the provisions of Sec. 40.305, Stats., . . . is authorizing the district to become indebted in a manner contrary to the constitutional inhibition."

This case appears to be in disagreement with other cases which I considered earlier. It must be remembered, however, in generalizing upon these cases, that each case concerned the constitutionality of a particular law under a particular section of a particular constitution. Nevertheless, that does not mean that no generalizations may be drawn. Aside from particular sets of facts, and particular laws, it is possible that in the realm of reasoning followed by the courts one may find similarities and differences.

One main difference appears to be noted. In the Pennsylvania case, considered in the August 1953 issue of *The NATION'S SCHOOLS* (*Greenhalgh v. Woolworth*, 64 A. [2d] 659), it appears significant that the court quoted with approval from an earlier case to the effect that "the fact that the proposed plan might be termed an evasion of the constitution would not condemn it unless such evasion was illegal. 'It is never an illegal evasion to accomplish a desired result, lawful in itself, by discovering a legal way to do it.'" With this point of view the Wisconsin court seems not to be in agreement as evidenced by the statement that "if the people are the authority over the constitution, we are bound, when moving from one basic plan to another, to move in that direction through the deliberate and thoughtful processes of constitutional amendment."

In so reasoning, the Wisconsin court appears to be in agreement with the line of reasoning set down by Judge Gilkison in his dissenting opinion in the Indiana case, which was considered in the September 1953 issue of *The NATION'S SCHOOLS* (*Protsman v. Jefferson-Craig Consolidated School Corporation*, 109 N.E. [2d] 889). Again, it should be restated that Judge Gilkison's opinion

was the dissenting opinion. Nevertheless, it is as clear and concise an opinion on his side of the argument as one can find. In it one sees a line of reasoning that may well be accepted by many jurists. He said: "It was asserted in argument that the state legislature [by this law] . . . has found a way to create an indebtedness . . . more than seven times greater than that permitted by the constitution. . . . If that end may be accomplished in this instance by the method attempted the way is wide open for its accomplishment in all instances, even to the point of complete insolvency of political and municipal corporations of the state." In addition, he had the following to say:

"This argument poses a simple question. That question is: Shall our state constitution be supported and sustained, or shall we have school buildings? Certainly we cannot immediately have both. The legislature in substance voted to abandon the constitutional prohibition and to have the schools. Thus the respected state officials noted have paid the heavy penalty demanded by the peculiar principle called 'expediency.' The question posed for us by this appeal if we consider the statute is: Shall we likewise be governed in our decision by the same principle?"

ONE OF MAIN ISSUES

It is with reference to this principle which Judge Gilkison called "expediency" that one appears to find the main difference in the reasoning of the courts. The Pennsylvania decision, although it did not use that term, appears to have endorsed the principle, while the Wisconsin decision, which, likewise, did not use the term, rejected it. Is this the real issue? At least it appears to be one of the main issues.

Now that the President, in his message, has recognized the use of school building authorities as one of the ways of meeting the crisis in school buildings, it is only logical to anticipate that much interest in this matter will be generated and that many state legislatures will be encouraged to enact legislation to this effect.

The people will react in various ways to the matter. Some will question the advisability of this aspect of the President's program on the ground that the constitutionality of laws creating such agencies is still not clear. Others will insist that federal assist-

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ance be of such type as to encourage the individual states to make direct attacks upon their fiscal problems by enacting legislation that will result in uniform assessments at more realistic values, in increasing indebtedness limits, and in increasing maximum tax levies.

Some others will argue with Judge Gilkison that the creation of such agencies may well result in creating problems of an even more serious nature than those the agencies are expected to cure. Nevertheless, many people will clamor for the enactment of legislation that will provide for such corporations or agencies. As a result, it seems that we can anticipate that more and more states will, in the near future, legalize school building authorities or agencies.

Regardless of the reaction of individuals to the idea of school building authorities as a means of solving our school building problems, one important legal question emerges: How

will the higher state courts rule on the question of the constitutionality of legislation of this type?

From what we already know, it is evident that they will be divided. The majority will probably declare it constitutional, however. Then, if Congress approves the President's suggestion and enacts legislation providing federal assistance to such agencies, what about the states in which they will be declared to be unconstitutional? Can a new type of law that will achieve the same result be written that will meet the test of constitutionality in all state courts? This is highly problematic because of the differences in the thinking of the courts.

Some will accept the reasoning of the Pennsylvania court, while others will undoubtedly accept that of the Wisconsin court. At any rate, it is quite possible that the real difference between the courts will be a difference of opinion regarding the principle that Judge Gilkison called "expediency."

Can State Building Agencies Solve the Classroom Shortage?

(Continued From Page 52)

corporation must have a minimum enrollment of 250 pupils. The company is to be a nonprofit corporation but set up under statutes governing corporations for profit. Its bonds are exempt from taxes, with the exception of the inheritance tax. There is a 30 year limit on the bond issue, and common stock can be sold up to 5 per cent of the estimated cost of the building. The shares of common stock are noninterest bearing. The school building to be constructed by the holding company must be erected on a site owned by the company. Fifty owners of taxable real estate must petition the school corporation to enter into negotiations, and to erect and to obtain a lease upon the building to be built by the holding company.

Bonding attorneys, by rule of thumb, have established a limit of 10 per cent of the assessed valuation of the school corporation to be the maximum amount a holding corporation may borrow. Bonds are an obligation of the school holding corporation and represent a first mortgage on the building. The investment firms are inter-

ested in wide participation in the sale of stock so that many people in the community will become part of the holding company. There should be a good public relations campaign before stock is offered for sale.

HOW STOCK WAS SOLD

In order to have complete coverage of our school community, we divided the town into blocks. Each block was assigned a captain who reported to the general chairman. A large thermometer was erected in front of the town hall so that people could see from day to day how much stock had been sold. Thereby, the project was kept constantly before the people so that interest in the campaign would not weaken.

The board of directors of the holding company actually hires the attorney, employs the architect, and issues the bonds. Therefore it is essential that the directors of the holding company and the school board members work together. At the beginning some common agreements should be worked out between the two boards. These agreements should become standard

policy for both boards to follow in planning and building the school.

Approximately 650 shareholders purchased 1030 shares of common stock of the corporation, at \$10 per share, to cover preliminary expenses in connection with the organization of the corporation. These expenses included paying for the initial plans and specifications and for the school site. However, the site may be purchased by the school corporation.

AN EXAMPLE GIVEN

In order to provide the funds necessary for the construction of our new high school, the holding corporation sold \$580,000 worth of first mortgage bonds. The lease agreement calls for the school corporation to pay a rental fee of \$45,000 a year for 20 years, the term of the lease. Insurance on the building and maintenance costs are to be paid for by the school corporation.

At the end of the 20 year agreement, the mortgage will be paid off, and the leased premises, including the building and fixtures, will belong to the school corporation.

The school corporation has erected a gymnasium wing on adjacent property for approximately \$350,000. It was necessary to sell \$104,000 of general-obligation bonds for this project.

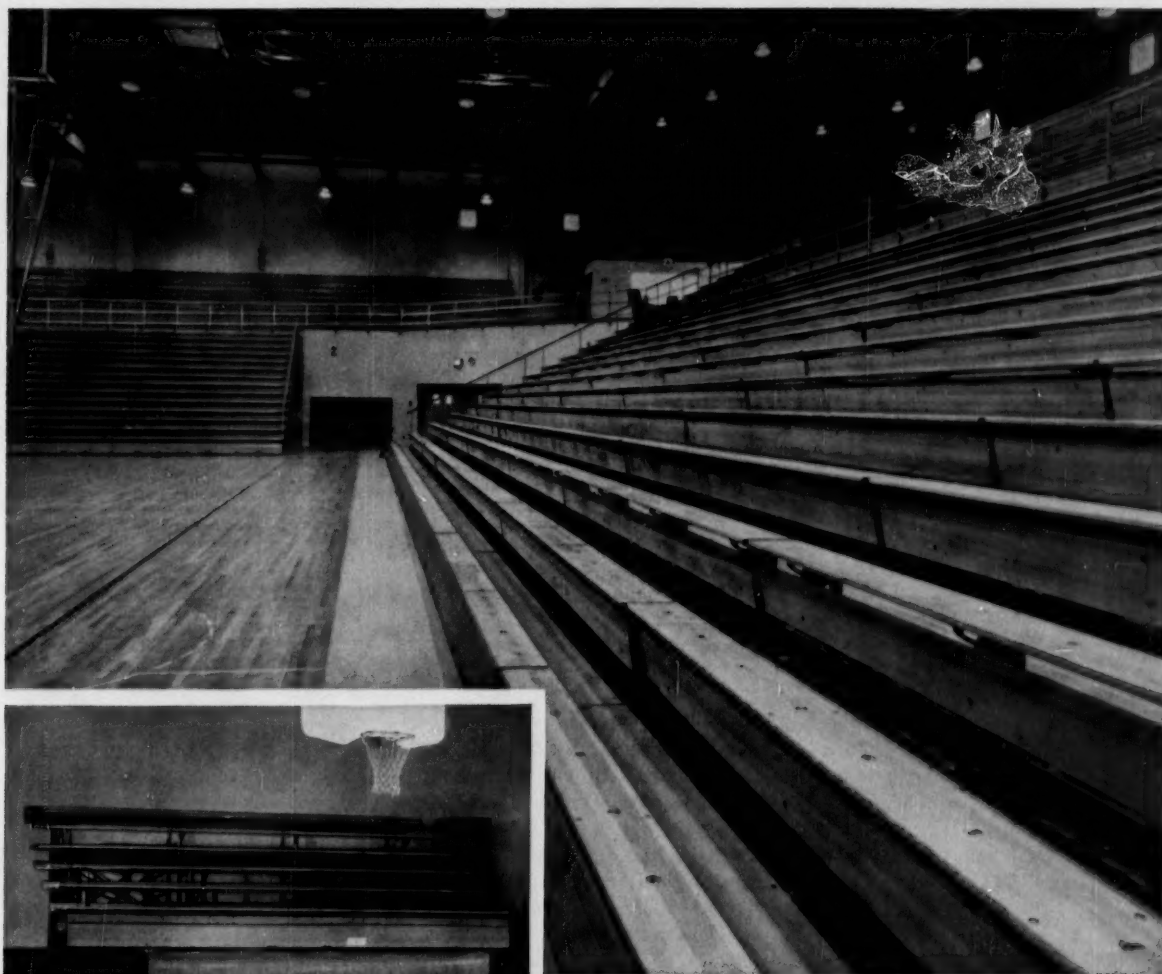
Bonds sold by the holding corporation bear 4 per cent interest, while the general-obligation bonds which the school corporation sold bear only 1 7/8 per cent interest.

Advantages and disadvantages of a holding company are as follows:

The important advantage permits a school corporation with insufficient borrowing power to meet an emergency and to provide adequate facilities for the increasing enrollment.

Costs are usually higher, as interest rates range from 3 to 4 per cent. Consequently, some communities may overextend their credit and thereby work an undue hardship on the taxpayer. There is evidence that as the holding corporation idea becomes more familiar and better understood by investment firms, the interest rate will continue to come down.

To amend the Indiana constitution to permit a school corporation to bond beyond the present 2 per cent limitation will be a slow, almost impossible process. Therefore, many school corporations faced with an increasing enrollment and a low assessed valuation will by necessity turn to the holding company to solve building needs.

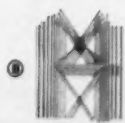


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Pennsylvania Law Brings Great Spurt in Construction

(Continued From Page 50)

sary to amortize their cost unless the general assembly sees fit at some future time specifically to provide money for that purpose. In addition, on February 16 there were on file 121 applications for new projects, totaling \$138 million, for which no approval has been given because of the limitation imposed in Act 431 of 1953.

The gross cost of approved authority projects subject to subsidization by the commonwealth is in excess of \$451 million. The gross cost of such projects approved without subsidy is \$22.6 million. The total of these two categories is not to be confused with the reimbursable cost of these projects, which is fixed by law at \$425 million. The department of public instruction in administering the approval of projects has adhered closely to the mandated ceiling. The gross cost of all projects submitted for approval to the department is \$612 million. This represents the gross cost of all projects including those that are already being financed through an authority and those that are being proposed for such financing. It does not include any school building projects financed directly by school districts through the issuance of general obligation bonds. During the same period an additional total of about \$100 million, raised through the issuance of general obligation bonds, was expended by school districts that did not resort to the authority method of financing.

The distribution of projects geographically is widespread. Sixty-five of the 67 counties have one or more such projects completed, under construction, or in the application stage. As is to be expected, the metropolitan and industrial counties have the greatest concentration of building projects.

Under existing laws the maturity period for bonds issued in connection with school building projects financed through an authority or through a nonprofit corporation may not exceed 40 years. In general, bond issues for projects constructed by the state authority have an amortization period of from 35 to 38 years. The amortization periods of bonds issued by municipality authorities range from five to 40 years. The interest rate on authority bonds ranges from less than 2.5 to more than 4 per cent. Most

such interest rates at the present time are from 3.0 to 3.2 per cent.

The annual rental cost per thousand dollars of bonds issued averages \$59.99. The commonwealth's share of this cost is about \$30 per thousand dollars of bonds issued, or about \$12,750,000 per year. The general assembly now in session has before it a proposal to increase the ceiling on subsidizable authority-financed construction to \$850 million. Should this proposal be enacted into law, the total annual cost to the state for rental subsidies may be increased by another \$12 million to \$13 million.

Kentucky Has Issued Revenue Bonds for 30 Years

WENDELL P. BUTLER

State Superintendent of Public Instruction

KENTUCKY statutes provide for the construction of school buildings by fiscal courts and city councils and the subsequent leasing of these buildings to county boards of education for school purposes.

The revenue bonds issued in the name of the fiscal court or city council are retired through revenue received in rental payments from the school board. As soon as rentals in sufficient amount have been paid to retire bonds and interest, the title to the building is transferred to the school board.

This plan has been used for 30 years by Kentucky school districts. Today it is a rare district which does not have outstanding some school building revenue bonds. In fact, only 15 of 120 county boards of education have no revenue bonds outstanding. On the other hand, 33 of 104 independent school districts have no revenue bonds outstanding.

On June 30, 1954, all of the school districts had outstanding revenue bonds in the amount of \$58,882,700. Technically, these bonds are mortgage liens against the property and do not constitute an indebtedness under the Kentucky constitution.

The court of appeals has given to the state board of education the authority and responsibility for approving issuance of school building revenue bonds, and through our division of finance we supervise the districts to the extent that in 30 years no investor has ever lost a dime through default of our school revenue bond issues.

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Checklist of a few of Oneida's many QUALITY features

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Success in life is forecast for the student whose high marks have merited the distinction of being "Head of the Class." Just so, it's the high-mark features that have won "Head of the Class" distinction for Oneida Safety School Buses, and predict their long and useful life. Let's look at the Record:

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Starts with the super-strong framework of reinforced steel, with body panels twin-riveted for veritable battleship protection. Increased driver visibility in windshield and entrance door, and equipped with every safety device of modern automotive body engineering.

"A" FOR QUALITY

Built to a high standard of Quality, Oneida is the greatest value-packed bus body available today. Highest grade materials in the hands of experienced craftsmen combine to make Oneida America's No. 1 Quality Bus Body.

"A" FOR DURABILITY

The built-in strength and quality are double assurance that the Oneida Bus Body will last longer and require less maintenance.

WRITE TODAY!

For free brochure giving pictured details of the Oneida School Bus Body. It will help you solve your school bus problems.



Watch for this long black line that sweeps into a curve at the end of a big yellow bus. It's the design that distinguishes Oneida as America's No. 1 Quality Safety School Bus.

SCHOOL BUS SALES DIVISION
ONEIDA PRODUCTS CORPORATION
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INSTRUCTION AND FACILITIES

We enticed parents to school to see how it operated, but mock school day was a flop. Under a new plan we find:



Drama class records on tape for rebroadcast.

Parents' Night Can Be Painless

DANIEL A. BRIGGS

Teacher, Columbia High School, East Greenbush, N.Y.

ONE of the most perplexing problems of public relations is that of bringing parents of pupils into the school to see the way it operates. Unless the visits are entirely spontaneous the situation becomes artificial.

A mock school day is one of the most artificial situations that could exist. Lost and confused parents are many times left stranded after third or fourth period, and for the remainder of the "day" they wander around

aimlessly trying to find where they should be. If the teacher in a mock school day has a large number of parents visit him, he usually is too busy to give each parent the attention he should receive. I have seen these programs and various adaptations of this method fail year after year, but still some administrators for lack of a suitable substitute come back for the same punishment—or rather, ask the parents to come back for more.

At Columbia High School, East Greenbush, N.Y., two years ago we inaugurated a new plan for parents' night. It can't be called a panacea, but judging from the enthusiastic welcome it received at our school it would at least rate a try by administrators.

What is needed to put this plan into operation can be found in most of our public schools. You'll need a tape recorder, an opaque projector, someone to take still pictures, a screen, and a place to seat the parents in a group. It is also wise to have someone who can operate all the equipment with comparative ease, as the major portion of the success of the program depends on the quality of the pictures and recordings and the coordination of the recorder and the projector.

The first step in this program is to compile a list of events or places

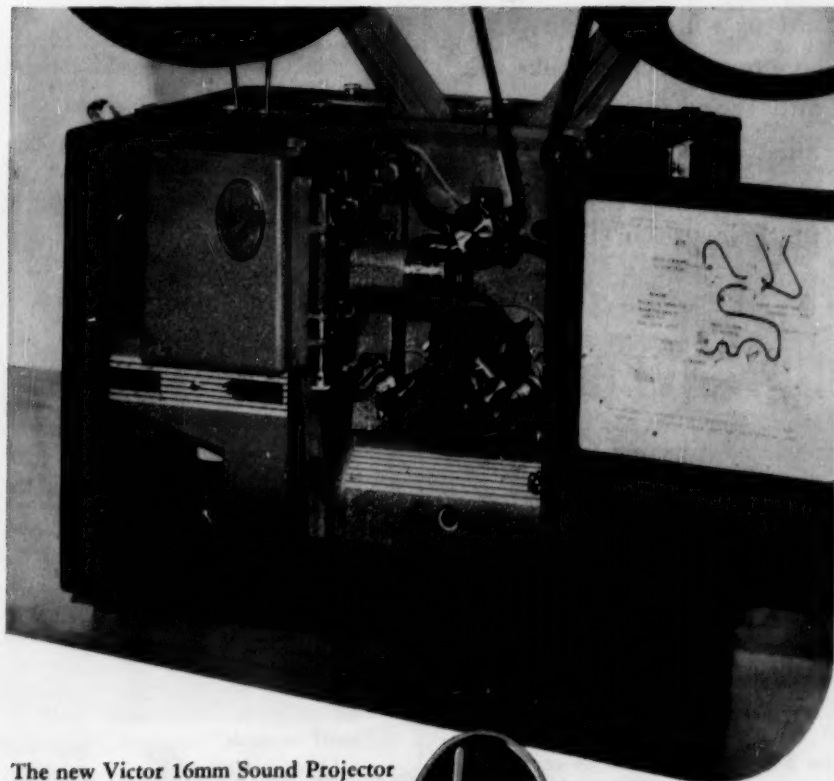


On Parents' Night, projector and recorder are synchronized to show scenes like this lesson in gymnastics in a physical education class. All phases of school operation can thus be shown.



The new Victor 16mm Sound Projector is threaded and in operation so easily that teachers use it at every opportunity. Even inexperienced operators can't damage films on a Victor. Teachers easily meet rigid schedules and enjoy using Victor Projectors. And Victor's superb sound and picture quality insures *better instruction*. Teachers appreciate Victor's features — Lubrimatic Oil System, Hi-Lite Optical System, Sapphire-Tipped Pawls and Air-Conditioned Lamp House.

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Easiest to operate (with fingertip control panel, softly illuminated). Start motor, turn on lamp, adjust sound volume.

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(preferably 25) that you would like to have the parents see and hear. These should be normal, everyday situations that occur in the school. The successful program will hinge on the appropriateness of events that are selected. Some of the ones we have used are:

1. Morning prayer and flag salute in a homeroom.
2. A French lesson on pronunciation.
3. The senior band in rehearsal.
4. Traffic in the hall at passing time between classes.

5. A physical education lesson in gymnastics.

6. A panel discussion in Social Studies 12.

7. The cafeteria at lunchtime.

8. The dramatics club having a play rehearsal.

The next step is to get a good set of photographs of the events that you have chosen. One print for each event is sufficient. The photographs should at least be 8 by 10 inches, glossy, and of good contrast. This is important, as they will have to be projected on the screen, and the view-

ers will want to see clearly what the activity in the picture is.

For the third step you will need the tape recorder to obtain a sample of the actual proceedings in each of these school or classroom situations. Keep the activities in an atmosphere as informal as possible. Make about a two-minute recording of the actual voices for each event. Have a narrator give a brief description of what is to take place on the recording, as well as the name of the participants. Be sure that the narrator you choose has a good radio voice, one that will reproduce well on a public address system.

The final step is the actual program itself. The operator should start the recorder and then change the pictures in the projector as the tape progresses through the machine. The whole procedure should take about an hour. You should have a printed (or duplicated) program, as we did at East Greenbush.

To round out the program, following the activities in the auditorium, the teachers and administrators can be grouped by departments in various rooms of the building. While in the rooms, there will be ample time for all the parents to talk with the teachers. If you conduct the program as we did, you should complete all the steps in less than 2½ hours and have an enjoyable time in the process.

And nobody gets lost trying to follow his child's full day's schedule in a mere 30 minutes.

PARENTS LIKE THE IDEA

Parental acceptance of this program has been extremely favorable. One parent said: "This represents a unique and novel approach to the problem of how to give a capsule treatment to pupil-school activities. As with all short-cut methods in presenting such a complex subject it has several shortcomings. On the whole, though, I endorse this treatment of 'Parents Go to School' as a relief from the usual methods."

Other parents said:

"I think this was the best Parents' Night that I have ever attended."

"A program of this sort really gives the parents an idea of what the daily routine in a school is. I was glad to have attended the school that night."

Spring has been our usual time for this event. We usually schedule one Parents' Night a year. This year's event will take place in the late spring.



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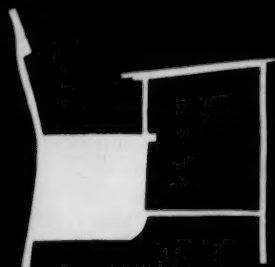
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THE SCHOOL LUNCH

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BREAKFAST AT SCHOOL

An interview with FRANK O. WASHAM

Director of Lunchrooms, Chicago Public Schools

SERVING breakfast to children and teachers in our schools is not a new practice. We've been doing it on a limited basis for more than 20 years.

The service is popular not only with children and teachers but also with the lunchroom personnel. Since our lunchrooms are operated on a self-sustaining basis, the serving of breakfasts has not added any expense for the taxpayer.

Without fanfare or publicity, our lunchrooms have been serving a morning meal during the last several years to as many as 2500 or 2600 students and teachers daily. Recently newspapers played up this fact as if it were a relatively new idea, with the result that we are now serving almost 5000 breakfasts to students and teachers daily.

NO MORE WORKING HOURS

Since the usual work day in our lunchrooms starts at 7 a.m., the serving of breakfast did not involve any additional scheduling of personnel. In a very few situations it has added an extra hour of employment for the staff members, all of whom are paid on an hourly basis.

We have taken extra precautions to make sure that the serving of breakfast does not cause tardiness of pupils in reaching the classroom. Service usually begins at 7:45 a.m. and continues through to 8:20. There are two warning bells, one at 8:20, which gives a student 10 minutes to get to class, and a final bell at 8:25 a.m. This means the boys and girls must be finished with their breakfasts and out

of the lunchrooms at least five minutes before classes start.

We have breakfast customers in all of the 55 high schools and junior



colleges and in 160 of our elementary schools. In the elementary schools, children are served milk or fruit juice and cookies at 10:15 a.m. In the high schools, teachers drop in at almost any time during the day for a "coffee break." Breakfast is offered in elementary schools wherever there has been a demand for it.

SHORT-ORDER SERVICE

Breakfast service is on a short-order basis, with bacon and eggs being the most popular menu. Price varies from a few cents for beverage (milk or hot chocolate) up to 35 cents for bacon and eggs. Cereals and other popular breakfast items also are offered, and, of course, we urge the school children to drink milk or hot chocolate.

The breakfast program has proved beneficial for teachers as well as students. It's an opportunity for teachers to have an inexpensive breakfast and

also a chance to visit with their fellow teachers before school starts.

In schools where breakfast is served, teachers have observed that fewer children have "the 11 o'clock slump." About this time of day, some become listless and inattentive if they have not had sufficient breakfast.

APPETITES WORKED UP

Many youngsters, like adults, don't eat breakfast upon getting up in the morning because they aren't hungry enough, not because food isn't available at home. But by the time they have run or walked or jostled their way to school, they have worked up an appetite.

Better school attendance also results from breakfast in school. In one school, the principal reported that tardiness has dropped 50 per cent since breakfast became available in that building at the beginning of this school year.

Our lunchroom employees like the morning program. Breakfast time gives them more of an opportunity to develop a comradeship among themselves and become acquainted with students and teachers. At noon the rush is so great that there isn't time to get acquainted.

All costs of food and wages are paid out of our lunchroom receipts. Our lunchroom budget also includes the cost of breakfasts and other meals furnished to children who cannot pay for them. During 1954 we spent \$108,000 for free meals, including lunches. We never turn away a child who doesn't have money for his food.

A rendezvous with elegance

The Pump Room at the Ambassador, in Chicago, is internationally known as a meeting place for the famous and a rendezvous for connoisseurs of good food. Its "flaming sword" service typifies the originality and thoughtfulness expressed in every detail. Spices are important to the master chefs of this and other famed eating places. They choose Sexton spices because they appreciate the meticulous care we take in selecting, milling, and blending these spices to meet their exacting needs.

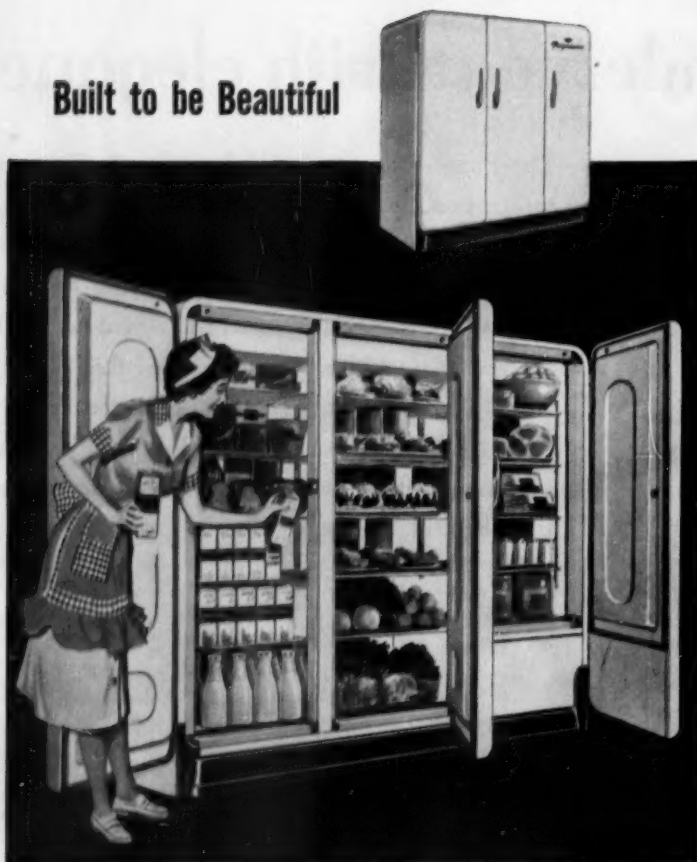


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Volunteer Assistants Work in School Lunchroom

OUR plan of using volunteer assistants in our elementary and high school cafeterias has proved successful. Most of the workers in our elementary school are mothers. They enjoy the opportunity of meeting teachers and other parents, and this system helps us to tell parents about the type of school lunch program we have.

In the high school, volunteer help is given by high school girls who devote their lunch period to serving meals and dishing out desserts.

We schedule three workers for each day so that if one cannot come in we still have two to rely on. We also have a list of substitutes whom we can call if only one or none of the scheduled assistants can come.

The mothers who help us work from approximately 10 a.m. to 12:45 p.m. They serve lunches, set up trays and milk for first graders, butter bread, and dish out desserts.

Volunteers require no training, other than being shown what portions of each food to serve. We do not require or furnish uniforms. Volunteers furnish their own aprons.

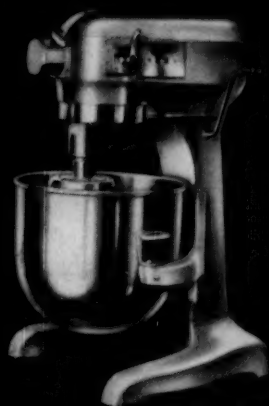
This volunteer service, begun several years ago, reduces operational cost by \$6 a day. Approximately 200 lunches are served in the elementary school cafeteria each day and 250 in the high school—ELVINA F. DELUCA, supervisor, school cafeterias, Ridgefield, Conn.

Importance of Vitamin C for School Children

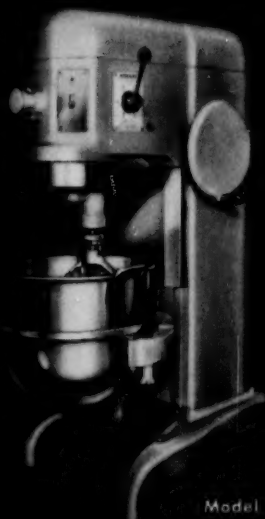
THE accelerated growth and increased activity of adolescence increase the need for all food requirements. Yet most teen-agers satisfy immediate hunger with an excess of carbohydrates and eat less than they need of "protective foods."

School lunches can correct this if they include the five food groups of the Type A lunch pattern and if one of the fruits and/or vegetables served is rich in Vitamin C.

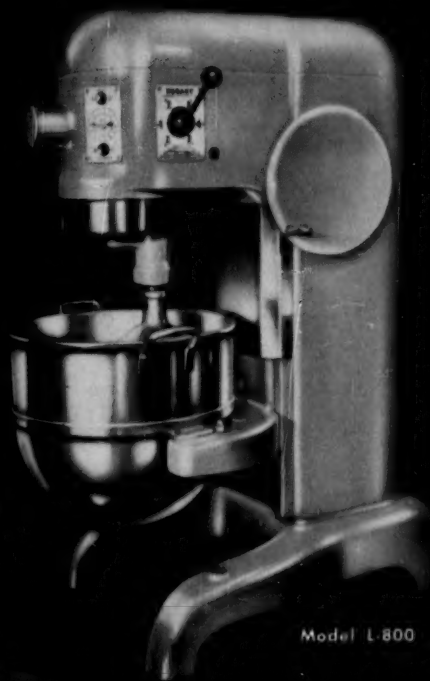
Vitamin C cannot be stored and so must be supplied daily. It is an essential part of the substance that holds the cells of the body together. Its presence in the blood is significant for safeguarding the health of the entire body; it helps to build up resistance to infection.—KATHERINE CONNELLY WISELY, area home economist, U.S. Department of Agriculture.



Model A-200



Model H-600



Model L-800



WATCH YOUR **P**'s in the kitchen

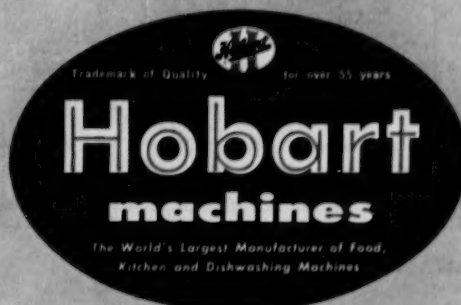
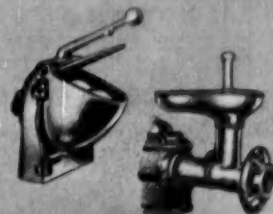


for Happy Queues*

* Student-type

Yes, with exclusive Hobart Planetary Action, Plus-Powered Hobart-designed and built motors and Positive Speeds, you get the Power and the Pattern for Peak Production and Perfect Fidelity to recipes. In plain words—good meals! Add streamlined, extra clean design and the extra efficiency of using your mixer power plant to deliver extra production through Hobart attachments—the most modern way. Then consider the protection you get from the Hobart guarantee and unrivaled sales and service set-up. See all 9 Hobart Mixers today (capacities 5 to 140 qts.). See Hobart for all your food, kitchen and dishwashing machines! . . . The Hobart Manufacturing Company, Troy, Ohio

Full Range of Mixer Capacities and Attachments. Use them for chopping, slicing, shredding, grating, etc., in kitchen, bake shop, salad pantry. Enjoy interchangeability of Hobart attachments and accessories on other Hobart units.



MAINTENANCE AND OPERATION

ACCOUNTING
SUPPLIES
EQUIPMENT

We keep finding new possibilities
for time saving with our

Tabulating Equipment

WILLIAM C. FEADER

Accountant, Board of Education, Baltimore County, Towson, Md.

BECAUSE of our increased accounting work load and its time consuming detailed operations, our auditors recommended that we use punched card technics not only to speed up the distribution of expense items to proper accounts but also to facilitate the tabulation of statistical information by schools, by vendors, by items, and according to any other classifications that might be desirable.

The method was inaugurated three years ago as an accessory procedure to existing bookkeeping machines. We have benefited from a substantial saving in time, both in accounting procedures and in quick availability of

much statistical data. Our new method provides finer breakdowns than could conveniently be tabulated with hand methods.

After an invoice has been approved and paid, a card is punched with the account distribution and other information. The total of payments recorded on punched cards is proved daily against the checks issued, thus avoiding the possibility of later error.

MANY TABULATIONS AVAILABLE

Sorting of cards for distribution and other purposes is done mechanically at high speed. From tabulated reports, totals are obtained which permit one

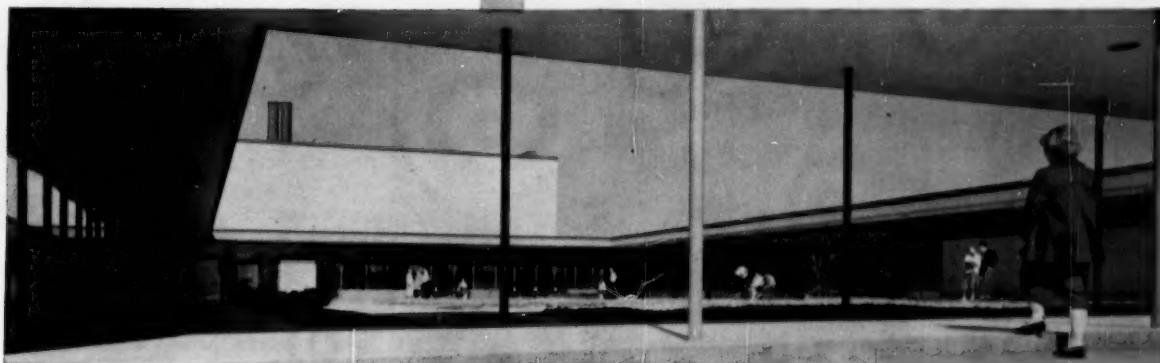
cumulative posting entry. Similarly, tabulations of other information are readily available, such as the payroll for teachers and other employees; personnel reports, from the number of employees in each department each month to the various degrees that teachers hold; an inventory of all school equipment, or the amount that each school spends for such items as books or band supplies.

Soon after we installed the tabulating equipment, we decided to put our payroll work on a machine basis. The actual production of the monthly payroll record, including checks and earning statements for 3200 teachers and

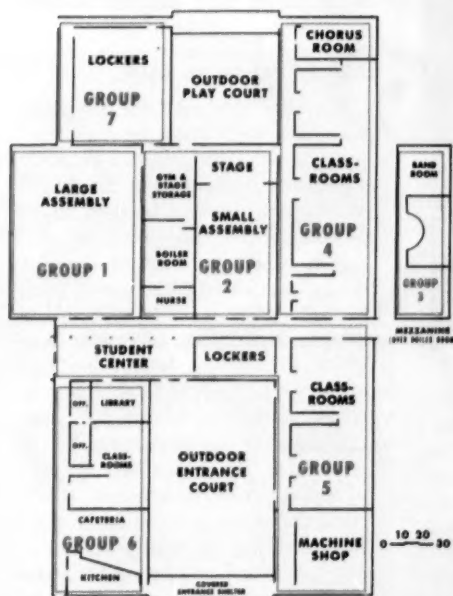
In addition to the information shown on this punched card, Baltimore County schools have forms showing an employee's name card, his earning statement, his check, and his name on the payroll register.

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another award-winning school
gains comfort . . . saves fuel
with **JOHNSON DUAL CONTROL**



Norman High School, Norman, Oklahoma, recipient of First Honor Award of the American Institute of Architects in 1954. Architects and Engineers: Perkins & Will, Chicago, and Caudill-Rowlett-Scott & Associates, Oklahoma City, and Bryan, Texas. Heating Contractor: Fischer Engineering Co., Norman.



Floor plan shows how Johnson *Dual* Thermostats are grouped for convenience. During regular school hours, a *Dual* Thermostat in each room maintains every space at the ideal comfort level. When classes are over, each group of thermostats is reset, from a central point, for lower, non-occupancy temperatures. In those rooms which continue in use, a touch of the button on the *Dual* Thermostat restores them to normal occupancy temperatures, *without changing the economy settings of the other thermostats*. In a busy school, heating only the occupied rooms can easily save enough fuel dollars to pay for the cost of the entire system!

Comfort *could have been* a real problem in this remarkable school. The size of the building itself is a factor . . . so are the large glass areas . . . widely varied room sizes . . . exposure . . . changing occupancy levels. A busy program of social, athletic and other extracurricular activities is another important consideration.

But comfort *isn't* a problem, and *never will be*, thanks to a pace-setting system of Johnson Automatic Temperature Control engineered to meet the exact needs of this building and its occupants.

Equally important, the special economy features of Johnson *Dual* Control make it possible to provide the finest in individual room temperature regulation at a large saving in fuel costs. The accompanying plan shows how.

You can easily insure the same degree of comfort and economy for your own school that Johnson has provided for this and thousands of other schools of all types and sizes. Remember, Johnson brings to each job over 70 years' experience in solving every conceivable type of temperature control problem in schools—*more specialized experience than anyone else!*

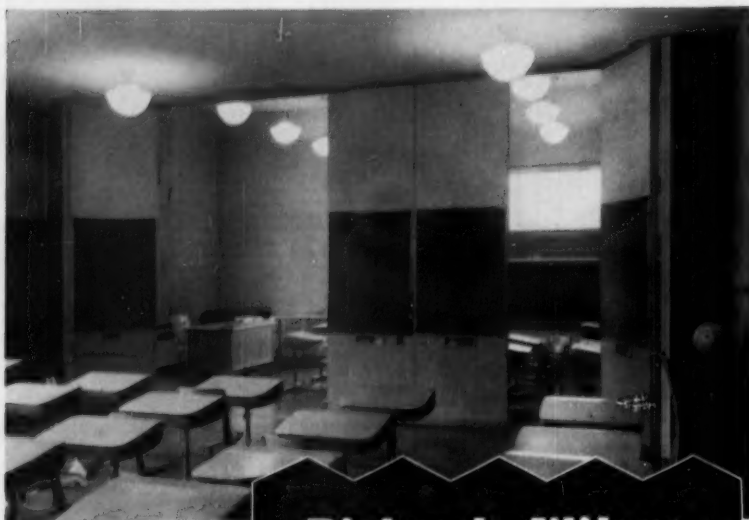
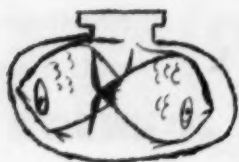
Why not take advantage of this experience? A nearby Johnson engineer will gladly make recommendations for any new or existing school without obligation. **JOHNSON SERVICE COMPANY**, Milwaukee 2, Wisconsin. Direct Branch Offices in Principal Cities.



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need space...



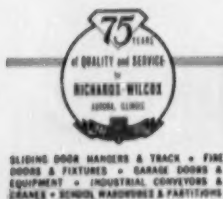
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need

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Folde R-Way
partitions

More efficient use of all available space... in many schools that's the only answer to over-crowding. That's why more and more schools are turning to R-W acoustically-constructed Folde R-Way Partitions—the multi-purpose folding walls—to help relieve congestion. Closed, they transform one big room into two sound-insulated classrooms... providing a laboratory tested sound-retarding value that effectively muffles even loud talking!

R-W Classroom Partitions are easy to operate, even for a child... making them ideal for all medium-size openings where manual operation is preferred. Available in a variety of operating types, standard equipment includes choice of chalkboard, corkboard or wood veneer, duck and plastic coverings to meet all interior design specifications. Other R-W school equipment includes fully automatic Folde R-Way Partitions and Classroom Wardrobes.

Write for descriptive catalogs.



Richards-Wilcox Mfg. Co.

SCHOOL EQUIPMENT DIVISION
Branches in Principal Cities

520 W. THIRD STREET, AURORA, ILLINOIS

other employees, is now completed in six hours of working time. With former hand methods, it used to take five days to handle the payroll for 1500 persons.

Our method is greatly simplified. There is a master card for each employee, punched with name, number, classification information, basic pay, standard deductions, and net pay. When the payroll report is received from each school each month, deductible absences are computed. In these instances, an "exception card" of a different color is punched with the variant figures applicable to that month and substituted for the master card.

The cards are then fed into a punching machine which automatically creates a set of payroll cards for the month. The master cards are returned to the file, and the "exception cards" are destroyed.

The payroll cards produce a payroll register on the tabulating machine. This tabulation is then "interpreted" by another machine that automatically issues checks and prepares earning statements.

USED IN ORDERING BOOKS

We also have used the tabulating equipment for making up our annual book orders. With master cards for the various textbooks and detail cards for quantities needed by each school, we complete the tedious task of ordering in about one-third of the time needed previously with manual methods. Moreover, there is no chance of error in transcription because of illegibility. Each school has a clear copy of its order, and each publisher receives his order in a form that makes fulfillment of it quicker and easier.

Within our school system many other procedures undoubtedly will be converted to the punched card method. It is one way in which we can reduce office and accounting costs even in the face of our school district's continuing growth. For instance, our department now employs seven full-time clerks. Had we not installed tabulating equipment, it would have been necessary to add 15 more because of the rapid expansion of population in Baltimore County.

We chose equipment that was recommended by our auditors. We lease the machines so that changes in equipment that will be required by expanded utilization would not leave us with a capital investment of little further use to our school system.



Rug Shampooing,
Wet or Dry



Buffing

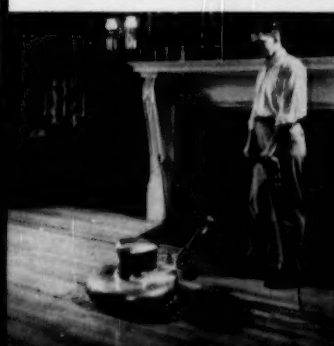
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ASTOUNDING PERFORMANCE ON
ANY JOB, ANY FLOOR, ANY RUG**

One Machine does 10 jobs! easier for operator ...
lower costs for management...two complete lines priced to fit every budget!



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Literature on request. Sales to Institutional Market through Sanitary Supply Dealers.

performance proved machines • world-wide sales and service

...write...wire
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AT LAST! A practical hair
drying service for public and private
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- Safeguards against colds.
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PERFECT for schools, YMCA, YWCA,
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Send me the facts on National Hair Dryers.

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A.A.S.A. Convention Digest

(Continued From Page 71)

"There is no sign that the problems being faced by the United Nations and the specialized agencies will be solved before the generation of students now under your care will have come of age and will have assumed control of the affairs of community and nation. I suggest that we teach about the U.N. system in such a way as to help equip young people to deal with the problems they will inherit."

THOSE BASIC SKILLS

The question is not "Are the schools teaching the basic skills as well as they used to?" but "Are they teaching the basic skills as well as they can?"

Whether they agreed with him on this statement or not, a standing room only crowd of administrators came Tuesday morning to hear William Kottmeyer, assistant superintendent in St. Louis, and his fellow discussion group speaker, Ernest Horn, professor of education and director, University Elementary School, State University of Iowa.

Mr. Kottmeyer admitted that the schools can do better. Language arts programs, for instance, need more support from administrators. The ability to speak clearly, effectively and reasonably correctly he called the No. 1 vocational skill today.

One difficulty facing big city teachers especially, he pointed out, is that many pupils are exposed for 40 or 50 minutes a day to English classes but during all their nonschool hours to quite different language usage.

As for the problem of meeting community criticism of teaching of the three R's, Mr. Kottmeyer said that if a child can read and spell, his parents are usually reasonably well satisfied with the schools.

Dr. Horn urged the schools to avoid clichés that defy the evidence of research and common sense and to base their teaching methods on proven research.

He suggested four methods that have produced good results—that is, pupils who know the basic skills.

1. Clearly describe the specific abilities to be developed.
2. Show the sequence in which the skills are to be taught and what levels of achievement are to be aimed at in the various grades.

3. Use instructional methods research has indicated are efficient.

4. Have a systematic program for evaluating the achievement of individual pupils and of the school system as a whole.

FORESTALLING DELINQUENCY

The superintendent and board of education have a responsibility for seeing that there are specialists to whom teachers can turn for "know-how" in coping with emotional problems and understanding the tensions of children, said Thelma W. Horacek, director, division of special services, public schools, Chattanooga, Tenn.

Mrs. Horacek was addressing a Tuesday afternoon discussion group meeting on mental health factors in juvenile delinquency.

"If all the specialist can do in a given case is to tell a teacher that the child is so disturbed that she cannot expect to change him, that in terms of the teacher's mental health is invaluable," she said. "Sometimes I wonder how many potentially useful teachers we lose by letting our young beginners fail with a child whom no teacher could have managed alone."

Administrators, Mrs. Horacek believes, have a responsibility for leadership in providing flexible curriculums, inservice training for teachers, and individualized services. They should be aware of exceptional children's need for special classes. And they should recognize the need for more male teachers, even in the elementary grades, because teachers often serve as parent-substitutes and ego-ideals in the case of many children.

"Juvenile delinquency is everybody's business," the speaker said. "The schools can't go it alone, but neither can they escape a major responsibility. Administrators and teachers must influence the attitudes of society toward the rights of all children."

THOSE EXCEPTIONAL CHILDREN

"I have yet to hear any proof that would stand up in court that [gifted] kids being worked on wouldn't be better off if nothing was ever done." So said Oscar M. Chute, superintendent of Evanston's elementary school district 65, at a Monday afternoon dis-

(Continued on Page 110)

NOW

add color to classrooms
with this new
Bulletin Board Material

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PASTEL TONES

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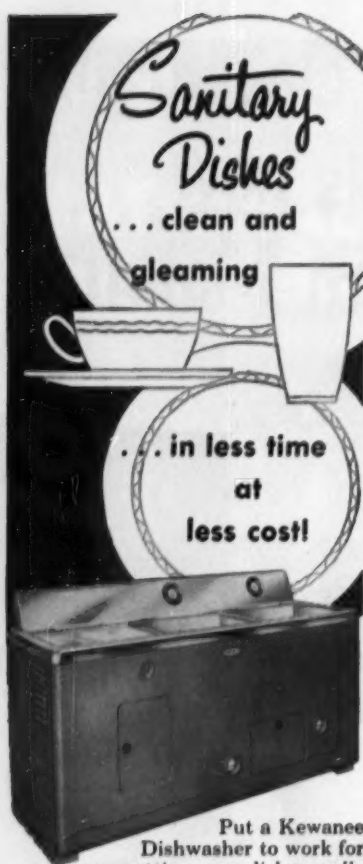
Now you can add that final touch of functional color to your classroom decorating schemes—by specifying one of the four pastel tones of new Armstrong Tackboard.

Armstrong Tackboard colors are permanent, go all the way through. The fine-textured resilient surface has high light reflectance. It's designed to help reduce eyestrain and nervous fatigue. And even though Armstrong Tackboard is soft enough to make tack removal easy, it will stand up under years of constant use without painting or other refinishing. Most soil spots can be removed with a soft rubber eraser.

You can order Armstrong Tackboard from leading school supply houses all over the country. It comes in $\frac{1}{8}$ "- and $\frac{1}{4}$ "-gauge continuous rolls, 48 or 72 inches wide. And for easier installation as well as a more attractive, more durable job, bulletin boards up to 85 feet long can be installed in one piece.

We'll gladly send you samples of Armstrong Tackboard in each of the four attractive colors. Write on your letterhead to Armstrong Cork Company, Industrial Division, 8304 Dock Street, Lancaster, Pennsylvania.

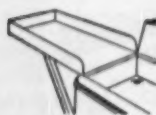
Armstrong TACKBOARD



Put a Kewanee Dishwasher to work for you—getting your dishes *really* clean. Highly turbulent wash water soaks and sweeps away food particles—at a temperature you can set from 120° to 160°, partially killing pathological bacteria. Then in the rinsing, 180° water completely and positively sanitizes every dish and utensil. Fast air-drying prevents re-contamination from towels.

Your Kewanee Dishwasher also saves a hired dishwasher's wages... washes dishes faster, with less breakage... uses less water and detergent for still greater savings.

NEW BASKETS are Plastisol-coated... resist wear, grease, kitchen acids... can't chip dishes. Standard equipment.



SPACE-SAVER DRAINBOARDS are stainless steel... handy for cleaning, loading, drying. Two sizes. Optional extra.

Write for full facts on Kewanee Dishwashers—no cost or obligation involved.

See Us at National Restaurant Show
A.G.A. Combined Exhibit

Kewanee
DISHWASHER

882 Burlington Ave., Kewanee, Illinois

A.A.S.A. Convention Digest

(Continued From Page 108)

cussion session on exceptional children. "Now some awful things are happening because of pressure on us," Mr. Chute asserted. "Elementary pupils must study foreign languages—from some teacher who remembers a little German she once had. Her little German pupils may cause embarrassment to a professional teacher of German when they get into high school. Before we go far along this road it would be better to know which way we should travel.

"Right now we in the Evanston schools have an enterprise (so-called because 'experiment' has become a dirty word; 'enterprise' will soon follow suit, so we must find another term) on how to determine who the gifted are—is it I.Q., achievement record, or what? Is giftedness nature or nurture? We don't want children riding a hobby and nothing but that hobby. We want to bring up the little musician as a richer person and not as a concert pianist. The school's problem is not to break down the child's special interest but to broaden it.

"We would like to find a fund to enable us to set up some gifted children in several different categories. We'd like some identified by the teacher to stay with that teacher under an enriched program. We'd like to try putting other gifted children under a specialized teacher for two or three hours a week. We'd like to put some with special teachers in one school.

"In these categories we would study the progress of each child. Then we'd like to get a jury of sociologists, psychologists and educators from the outside to be our advisers; they would make a separate report on the children. After such a study, we would know better which way to move," Mr. Chute concluded.

TRAINING HANDICAPPED FOR JOBS

Ray Graham, director of education for exceptional children in the Illinois state department, told the same large audience that most of the special services for handicapped children are provided on the elementary school level.

"The taxpayers are happy about our work with handicapped children. However, if we don't start to pay some attention to these children on the high school level, the citizens will begin

to question the whole program. When these handicapped children reach high school age, they must be counseled and trained with later employment in mind. Our next step must be at the secondary school level."

TASK OF DECISION-MAKING

A lot of the administrator's problems come from his willingness to take on too much responsibility, agreed a panel of educators discussing human relations in administration Tuesday. Clyde Campbell, professor of school administration at Michigan State College, said "administrators are bringing on themselves an excess weight of problems by trying to 'sell' a school program to the community." He described the rôle of the superintendent as one of working with staff and community. It just isn't "his" program, Dr. Campbell said.

The task of decision-making is one that calls for the best skills in human relations that can be developed, panel members agreed. "We get in trouble with decision-making awfully easy," Dr. Campbell reminded the group, "when board-administrator relationships are not clear." The clearing-up process is the critical test, a superintendent in the audience advised.

KEEPING FRIENDLY WITH PRESS

Superintendents attending the panel discussion on "Ways of Improving Cooperation Between the School and the Press" spoke of two problems: One is how to keep certain stories out of the press, and another is how to get other stories in. On the first point, the answer given by Charles C. Clayton, executive assistant of the *St. Louis Globe-Democrat*, was: "You can't; real news will not be suppressed."

Schools were advised by Mr. Clayton to keep news channels open—board meetings, administrative decisions, and feature stories from the classrooms. The feature stories are the ones that school people want to get in print. Mr. Clayton suggested that acquaintance with the routine demands of the newspaper business by administrators would help matters out considerably. Find out, he suggested, what days are best for feature stories (Monday is a good day) and get them in on time.

He advised that some person in each school system should be in charge of public information. It could be a part-time position, he said. Part-time or full-time, though, "take him into your full confidence" was his final advice.

EVERYTHING'S RIGHT ABOUT

REVERE WARE

INSTITUTIONAL COOKING UTENSILS

When you pick up one of these new Revere Ware utensils, you'll instantly note that it's *right* in every way. It's made of the *right* combination of metals. Stainless steel for long, long wear and rugged use. Copper *on the bottom* to spread the heat quickly and evenly for best cooking results. You'll note that its weight is *right*. And there is a *right* size and type of Revere Ware Institutional utensil for good cooking needs.

ONLY REVERE WARE COPPER-CLAD STAINLESS STEEL INSTITUTIONAL COOKING UTENSILS GIVE YOU ALL THESE ADVANTAGES!

- Revere Ware's thick copper bottoms provide even heat distribution, eliminate hot spots, reduce scorching and burning.
- They are made completely of seamless copper-clad stainless steel providing the durability that eliminates replacement costs. Your first cost is your last cost! There is no tinning or plating to wear out.
- Stainless steel is easy to clean, saves labor, meets the high sanitary standards required where food is cooked for mass feeding.
- Stainless steel handles, both loop and straight, are securely welded to the outside of the utensil leaving the inside free of rivets and other dirt-catching crevices. Handles are designed to permit utensils to be hung for convenience or attractive display.
- Flat recessed covers are designed to permit stacking of pans safely to save valuable space on range or in storage. Covers can also be hung or stacked in minimum space.

The skills and experience that produced famed Revere Ware—favorite of millions of housewives—have been incorporated in these utensils. Every detail of sound construction and correct design necessary for good cooking can be found in these Revere Copper-Clad Stainless Steel Cooking Utensils for the Professional Chef. Available now! For complete information send for a catalog, and name of nearest dealer.



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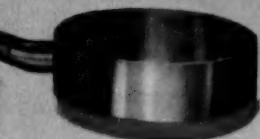
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1 Quart
to
30 Quart



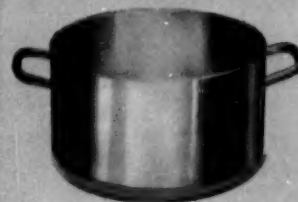
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to
5 Quart



BRAZERS

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From
6 Quart
to
16 Quart



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From
2 1/2 Quart
to
20 Quart

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National School Boards Assn.

(Continued From Page 73)

members when he attacked the plan of automatic salary increases and absence of provisions for the reward of meritorious teaching.

On the last day of the February 24 to 26 meeting the delegates approved a resolution favoring federal aid for school buildings on an emergency basis. The resolution plainly warned against any plan that would interfere with local school administration. The delegates also accepted the grant of \$50,000 from the Fund for the Ad-

vancement of Education for a one-year program of research and service, to be directed by Maurice Stapley.

The format for the 1955 convention was changed from that of former years by the addition of two new conference technics. In order to keep discussion groups small, three audience groups were formed, and three panels of experts "rotated" through three simultaneous sessions. A second innovation was the time set aside for personal consultation with the experts who participated on the panels.

The program for the first evening

of the convention was billed as "Messages From Our Friends." The message from the N.E.A., given by Waurine Walker, president, was: "Face up to the magnitude of our school problems today." Miss Walker gave this quick view of the size of our shortages: "We are faced with the necessity of constructing a school system about one and one-half times as large as the one we now have. Our increased birth rates are adding to the U.S. a city the size of Richmond every month."

In her final appearance before the N.S.B.A. prior to relinquishing the presidency of the National Congress of Parents and Teachers this summer, Mrs. Newton P. Leonard described what it means to be a "dedicated board member or P.T.A. member."

"It means children come first," said Mrs. Leonard. She warned school board members about being swept overboard by the ugly emotional controversies over textbooks, by the "demands from the powerful and influential, from the well intentioned, from the narrow, the shortsighted, or the self-seeking."

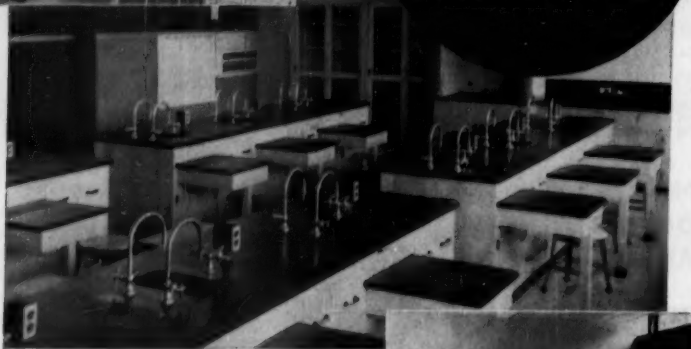
Advice for the board member from Mrs. Leonard was this: "The thinking of school boards must be a model of how the dispassionate, impartial, mature mind comes to grips with problems—how it analyzes and defines the problem; how it seeks facts from reliable sources; how it weighs evidence and finally arrives at decisions, not in terms of popularity but in terms of what is good for the public welfare. We need unyielding integrity and magnificent courage on our boards. We need the finest and most mature kind of thinking on educational problems. Nothing less will do."

To get the best possible thinking on educational problems, as Mrs. Leonard suggested, the N.S.B.A. delegates talked a lot about the forthcoming White House Conference on Education and the state conferences, many of which are under way now. The association agreed to work closely with the conference staff and the National Citizens Commission for the Public Schools in promoting and conducting community conferences from which delegates to the larger conferences will be chosen.

At the closing session O. H. (Herb) Roberts Jr., attorney and local school board president at Evansville, Ind., succeeded Jesse G. Stratton of Clinton, Okla., as president for the coming year. The 1956 convention will precede the A.A.S.A. convention in Atlantic City.



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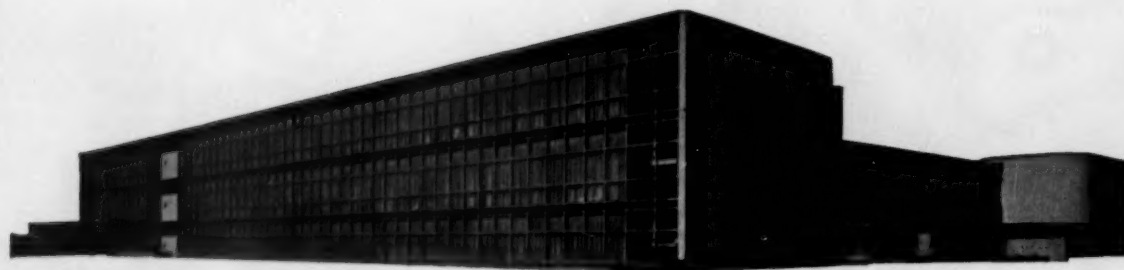


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By EDGAR FULLER

Federal aid likely

► The Administration's bill to provide federal assistance for school construction (S. 968) met the almost unanimous opposition of educators during Senate hearings late in February. The proposed bill was regarded as inadequate in scope, objectionable in content, and not in accord with the stated purposes of the President's special message on education. Not a single chief state school officer in any state or territory stepped forward to support it, and most were openly in opposition to the principal provisions of the Administration bill.

In March, the House committee on education and labor held extensive hearings on the several proposals before the Congress, including that of the Administration. Prominent in the House committee discussions were the identical and bipartisan bills (H.R. 14 and H.R. 15) introduced by Reps. Kearns (R.-Pa.) and Bailey (D.-W.Va.). This legislation was approved by the House subcommittee on education late in December.

With both parties in favor of it, there is a good chance that there will be legislation for federal assistance to school construction in this session of Congress. The final form of the legislation will be determined by the House and Senate committees chaired by Rep. Graham A. Barden and Sen. Lister Hill. It appears certain that any legislation passed will provide substantial federal grants to the states distributed on the basis of an objective formula and that there will be state administration under state plans developed in the respective states.

Kestnbaum leak

► On February 23 a member of Congress who is opposed to federal assistance for school construction gave the Associated Press a copy of the report of the committee on federal responsi-

bility in the field of education, a study group appointed by the Commission on Intergovernmental Relations. This leak was apparently timed to encourage the National School Boards Association, then meeting in St. Louis, to take a similar stand. The maneuver failed when the association passed a resolution favoring federal assistance for school construction.

According to the *New York Times*, the committee made these major findings:

Schools: A "grossly inadequate school plant" now exists in the United States, but "we have been unable to find a state which cannot afford to make more money available. . . ."

"The taxing powers of states and localities, if relieved of crippling handicaps (such as bonding limits) . . . can reach the taxable wealth where it is located and where it is needed."

School lunch program: "The program is in the sphere of responsibility of the states and school districts and the parents and should be carried by them. . . . Federal participation should be gradually tapered off."

Vocational education: "State and local governments should provide their own funds for an adequate . . . program" except where a "clear national interest . . . is involved."

Libraries: "Having decided that . . . public libraries are primarily a state and local responsibility . . . we have concluded there is not" a "compelling national interest involved" to justify federal participation.

A major contradiction

► Clearly discernible in the quotations from the committee report is a major contradiction in regard to the largest issue. The *Times* quoted the report as follows:

"While we are opposed, generally speaking, to grants-in-aid, as the whole import of our report has indicated,

we believe that if that principle is to be abandoned and there are to be grants-in-aid, schools should not be ignored . . . where federal grants-in-aid are given.

"The amount should be large enough that it will encourage rather than retard the local communities in providing school buildings as they are needed. The appropriation of relatively small sums of federal aid for school construction—amounting to 10 to 20 per cent of the present state and local outlay of almost \$2 billion a year—may delay rather than advance school construction."

The Associated Press dispatch commented: "This appeared to be an argument for a federal aid program of at least \$200 million a year, if there is to be any aid at all."

Of course, the principle of opposition to grants-in-aid has long since been abandoned by the Administration. There have been increased federal grants each year since the Commission on Intergovernmental Relations was established in 1953. For instance, cash grants to states for highways were increased \$300 million per year as of July 1, 1954, and much larger increases are now proposed by the Administration. Influential Democrats in Congress are supporting comparable programs.

Since both major parties support federal grants-in-aid in numerous fields, such programs may be regarded as national policy. To suppose this policy may be reversed by either party is completely unrealistic. The choice is not between no federal grants-in-aid at all and grants for many physical facilities except schools; the choice is merely whether to give school construction an even break along with roads and other physical facilities which are getting increased federal funds year by year.

School construction, the committee says, should be treated equitably "...

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where federal grants-in-aid are given." This conclusion presumably does not refer to cash grants, such as those for public assistance and agriculture, but only to instances where the federal government makes grants to assist states and communities in the construction of physical facilities. The committee says its general conclusion opposes federal grants generally, but it recognizes that, if there are to be federal grants for roads and other physical facilities, then elementary justice requires that there should also be federal grants for schools. Since the federal government does make increasingly large grants for roads and other physical facilities, it is clear that the committee contradicts its own general conclusion when it specifically approves grants for the construction of schools.

Commission will decide

► The Kestnbaum Commission itself has been wrestling with these problems for months; it is under no obligation to accept the recommendations of its committee. Since Clarence E. Manion directed the establishment of the commission, the Eisenhower Administration has changed its position on federal assistance for school construction. It would indeed be surprising if the commission, although most of its members are known to have been against such grants for education when they were appointed, should now make recommendations contrary to the recent special message to Congress of the President who appointed the members. Neither is it likely that the commission will, in view of the probability that its report will have slight effect on what Congress will do, deliberately disassociate itself from the clear determination of millions of citizens to have federal support of schools and libraries and school lunches, as well as roads.

Conferences on education

► Plans for the White House Conference on Education are moving forward, and many of the questions of educators are being answered. Following are some of the plans:

There are six major topics suggested both for the state conferences and the White House Conference itself. These are:

1. What should the schools of the United States accomplish?

2. In what ways can we organize our school systems more efficiently and economically?

3. What are our school building needs?

4. How can we get enough school teachers—and keep them?

5. How can we finance our schools—build and operate them?

6. How can we obtain a continuing public interest in education?

Present plans call for a total of four separate, although more or less coordinated, approaches to each of these six questions. These are:

1. The reports of state conferences.

2. The recommendations and comments of the six subcommittees of the national committee, which will be sent to all participants in the state conferences.

3. The conclusions of the 2000 persons who will participate in the White House Conference itself from November 28 to December 1.

4. The final report of the White House committee to the President.

The state conferences will be guided and influenced, although not controlled, by the reports of the six subcommit-



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tees of the national committee. Each delegate to the White House Conference will presumably come to Washington with a copy of the report of his own state conference, together with copies of the reports of the six subcommittees of the national committee. These two reports probably will not coincide in details, either in the scope of topics or in conclusions reached. The state conferences are free to consider any problems or issues in education, whether or not they are included in the six questions posed by the national committee or in the six subcommittee reports submitted to the states, and to reach their own conclusions on all matters considered.

COMMITTEES IMPORTANT

This structure makes the personnel of the six subcommittees of the national committee a most important factor. The chairman of Committee No. 1 considering "What should our schools accomplish?" is President James R. Killian Jr. of Massachusetts Institute of Technology. The consultant for this group is Dean Francis Keppel of the Harvard University Graduate School of Education.

The chairman of the committee concerning school system organization is State Commissioner H. Grant Vest of Colorado, and the consultant is Howard A. Dawson, director of the Department of Rural Education, N.E.A.

BUILDING NEEDS

Committee No. 3, which will review our school building needs, will be chaired by former Gov. W. Preston Lane Jr. of Maryland, with Prof. W. D. McClurkin of George Peabody College for Teachers as consultant.

Committee No. 4, dealing with an adequate supply of competent teachers, will be chaired by Mrs. Rolland N. Brown, first vice president, National Congress of Parents and Teachers, with Ray C. Maul, assistant director of the N.E.A. research division, as consultant.

It is the plan that the first four committees will consider their problems consecutively in the order named rather than concurrently, so that Committee No. 5, which will deal with "How can we finance our schools—build and operate them?" will have all the results from the first four committees before it when it goes into action. Committee No. 5, which obviously is

the most important in terms of recommendations for future local, state and federal action, will be chaired by Frank C. Moore, former lieutenant governor of New York and now president, Government Affairs Foundation, Inc. Mr. Moore was a prominent consultant in the formulation of the Administration's plan for school construction aid recently introduced in the Congress by Senator Smith of New Jersey (S. 968). The consultant for Committee No. 5 will be Prof. Edgar L. Morphet of the University of California, a highly respected authority on the structure and financing of education.

The sixth committee, dealing with public relations, will be chaired by Jesse G. Stratton, immediate past president of the National School Boards Association. This committee will have two consultants: Supt. Paul J. Misner, president-elect of the American Association of School Administrators, and Prof. Morris S. Wallace of Oklahoma A&M.

THIRD APPROACH

The third approach will be the White House Conference, which, on the basis of the recommendations of the state conferences and recommendations of the subcommittees of the national committee, presumably will reach some conclusions of its own.

The fourth step will find the White House Conference Committee on Education itself coordinating the state conference, White House subcommittee and White House Conference reports and recommendations into a single blue-ribbon report for presentation to the President.

After the current sad experience with the Administration's proposed legislation for federal assistance to school construction, which had little or no relationship in fact to the stated purposes of the presidential message which accompanied it, educators are understandably curious and even suspicious about what is going on in regard to the state and White House conferences on education. The report of the Kestnbaum Commission's study committee has greatly heightened the distrust, and the report of the Kestnbaum Commission itself may further emphasize trends widely regarded as inimical to the welfare of public education. There is widespread fear that these activities may be slanted in the direction of barring the public schools, alone among major public services, from federal financial assistance.

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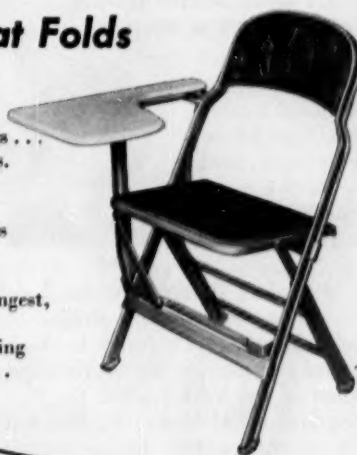
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NEWS IN REVIEW

Quotas Set for Representatives at White House Conference

WASHINGTON, D.C.—Quotas for representatives at the White House Conference on Education in November have been set for states and territories.

The minimum number of representatives from each state and territory is 10. New York State heads the allotments with 123 representatives; California will have 98, and Pennsylvania 86. The territories of Alaska, Hawaii, Puerto Rico, and the Virgin Islands will be represented, as well as the states.

The planning committee anticipates an attendance of about 2000; 70 per cent will come from the states and territories. The remaining persons will be representatives of organizations and associations which have taken part in the conference programs in the states and territories. Members of Congress who have legislative responsibilities for education and foreign observers will also attend.

Mrs. Fenner, Miss Maehling Take New N.E.A. Posts

ST. LOUIS.—Two important National Education Association posts were filled by the N.E.A. executive committee at its meeting here on February 28.

Mildred S. Fenner, who has been the acting editor of the division of publications since December, has been named director of the division and editor of the *NEA Journal*. Dr. Fenner, a native of Huntsville, Mo., and the author of two books, became managing editor of the *Journal* in 1952. She has been on the association's headquarters staff for 24 years.

Hilda Maehling was appointed assistant executive secretary for professional development and welfare of the N.E.A. This post was created in a reorganization move by the executive committee, which also created the post of assistant executive secretary for informational services, a position yet to be filled. Miss Maehling has been executive secretary of the department of classroom teachers of the N.E.A. for



Mildred S. Fenner

12 years. This department includes nearly 85 per cent of the membership of the N.E.A.

Margaret Stevenson has been named associate executive secretary of the department to carry on the duties which Miss Maehling had performed.

California Pays Nation's Highest Teachers' Salaries

NEW YORK.—Teachers' salaries are higher in California than in any other state, according to a survey published by the Tax Foundation, a private research organization here.

The survey revealed that the average beginning salary for teachers with college degrees is \$3115 in cities with populations of 100,000 or over. Teachers in the South receive generally the lowest starting salaries, from \$2400 to \$3440, while in the West teachers receive from \$3120 to \$3940. Salary schedules in rural areas on the whole are lower than those for cities.

However, the report points out, teachers receive additional benefits which are not noted in salary schedules. These include sick leave, which is generally cumulative, and in more than half the cities help for professional advancement. Teachers are granted leave for travel, in some cases on half-pay, and they are on duty only from 180 to 190 days a year.

Michigan Professor Predicts Future All-Year School

ANN ARBOR, MICH.—School seven days a week, 12 months of the year, is probable in the future, according to C. Max Wingo, professor at the school of education, University of Michigan. The 12 month school is almost bound to come about in answer to social pressures which are demanding that some services to youth now neglected be provided, he explained.

The family in our present urban society can no longer give vocational training, Prof. Wingo said. There is even some indication that the family is not giving much attention to children's health.

The schools that Mr. Wingo foresees would take over responsibility for the development of avocational interests and skills, for children's health, for religious instruction, and for in-

struction in the physiological, emotional and ethical aspects of sex behavior.

West Virginia Reports Progress in School Race Integration

CHARLESTON, W.Va.—Schools in West Virginia are gradually moving toward race integration, reports W. W. Trent, state superintendent. There are now 29 counties in which schools are integrated in part or in full, three of them in transportation only. In 10 counties there are no Negro pupils in elementary or high schools, Dr. Trent said; 16 other counties have not yet taken action on the issue.

The number of schools that has been integrated includes 86 for elementary pupils, 12 for junior high, and 37 for senior high students, according to Dr. Trent. In the integrated high schools there are now 427 Negro students and 26,010 white students; in integrated elementary schools, 581 Negro and 18,578 white children.

There also has been some integration of teaching staffs. The report states that there are 897 white teachers teaching children of both races and 15 Negro teachers are in the integrated schools.

Revived Interest Seen in Teacher Education: A.A.C.T.E.

CHICAGO.—An optimistic view of the shortage of teachers as it affects teacher education was taken by L. D. Haskew, vice president and dean of the college of education, University of Texas, at the annual convention of the Association of Colleges for Teacher Education here February 24 to 26.

"The present shortage of teachers can awaken many previously disdainful colleges to their responsibilities and opportunities [for training teachers]. It can rekindle the zeal for teacher preparation which once characterized many able faculty members in the arts and sciences," Dr. Haskew, president of the association, declared. "It can introduce into the designing and execution of school programs for the preparation of teachers new ideas and new influences, and even some new scholarship."

There is a trend toward expanding the curriculum of teacher training in-



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NEWS

stitutions and changing them from professional schools into general education colleges, Samuel M. Brownell, U.S. commissioner of education, told the representatives of the A.A.C.T.E.

Dr. Brownell described the steps that teachers colleges would have to take to meet the increasing number of students that will soon be seeking admission to these colleges. Leaders in education, he said, face the problem of deciding whether they will expand their offerings and accept all applicants indiscriminately or whether they will select only outstanding teacher education prospects. There is danger, he said, that through the pressure of the need for teachers the standards of educating them may drop, but, Dr. Brownell asserted, these should be maintained in spite of the press for mass education.

Beyond the problem of providing teacher training for American students, said Dr. Brownell, there is great need for teacher training in foreign countries. "The pressure to extend schooling is most explosive in the countries where schooling has been most re-

stricted. . . . The tragic fact is that one of the greatest shortages in all countries is that of personnel who can give rudimentary or advanced preparation for those who will train the greatly increased number of teachers required." Many countries are looking to the United States for help in establishing and carrying out programs of teacher education.

Speaking on academic freedom, Alonzo F. Myers, chairman of the department of higher education, New York University, stated that only the personal courage of all members of the educational profession and students and alumni as well can protect truth in teaching.

"Today too many teachers are afraid. There are too many questions that they feel dare not be asked or answered in their classrooms," Dr. Myers said. Teachers should realize their responsibility for fostering an independent spirit in their students as well as exercising the right of free expression themselves.

The best time to recruit youths for teaching is while they are in high

school, and teachers are not doing much to capitalize on this, said William A. Brownell, dean of the school of education, University of California. "The most potent force in encouraging youth toward teaching can be the regular classroom teachers. The encouragement can be indirect, as when teachers exhibit overtly the satisfactions they find in teaching, or it can be direct, as when teachers talk individually with youngsters about their career plans. The bond which exists between the skilled, enthusiastic, happy and friendly teacher on the one hand and the appreciative student on the other is something very special."

Teachers are often unwilling to take advantage of this opportunity for fear of unduly influencing their captive audiences, he said. They argue their students should select careers without undue pressure and with complete information on a variety of careers.

"The intervisitation program will be recorded as the most far-reaching and successful effort for the improvement of teacher education ever undertaken," stated Edward C. Pomeroy, secretary-treasurer of the association. The intervisitation program, initiated four years ago, has provided teacher education colleges which are members of A.A.C.T.E. opportunities for exchanging ideas and teaching methods.

Many institutions have reported that new trends in curriculum have come about as a result of the exchanges which the intervisitations have offered, Dr. Pomeroy said. The program has also been effective in coordinating the work of many professional and legal agencies concerned with the education of teachers. It has helped to develop experienced evaluators of teacher education programs and has contributed to the fostering of personal contacts between college administrators and staffs, he explained.

At the business meeting of the convention Rees H. Hughes, president of Kansas State Teachers College, Pittsburg, was named president-elect, succeeding L. D. Haskew, who became president. The former president of the association, Herbert D. Welte, president of Teachers College of Connecticut, New Britain, was named a member of the executive committee for the coming year. E. B. Norton, president of State Teachers College, Florence, Ala., was named to the executive committee for a four-year term.



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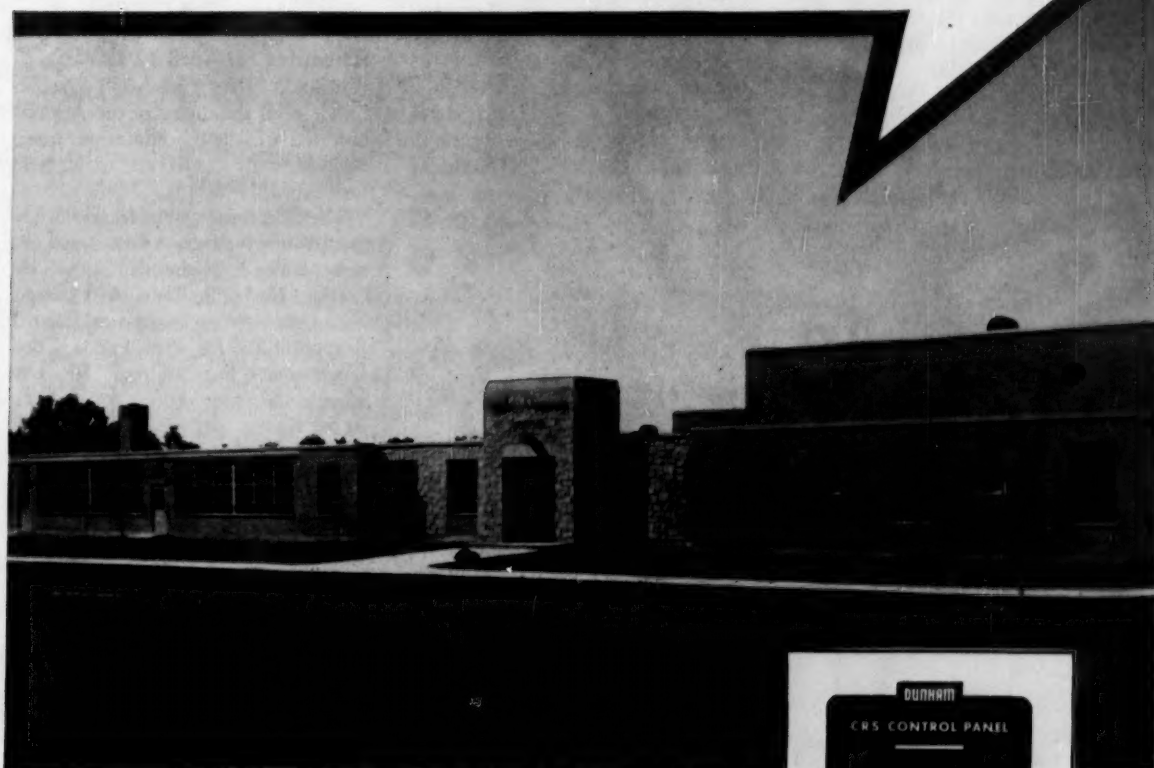
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NEWS

Educational Programs Filed at National Tape Repository

KENT, OHIO.—The National Tape Repository was established recently at Kent State University here to house recordings of the best programs of 14 educational organizations. The tapes are being collected here so that educators throughout the country can have copies of the master tapes made for classroom use.

The repository was begun under the co-sponsorship of the Department

of Audio-Visual Instruction of the National Education Association, the Association for Education by Radio-Television, Kent State University, and some tape recording manufacturers. Now there are more than 3000 master tapes deposited at the center.

To obtain a copy of a master tape a teacher sends a reel of blank sound recording tape to the repository, along with an order blank for the particular program desired. The program is recorded onto the blank tape at the

repository, and the "copy" is returned to the teacher. Catalogs listing and describing programs are available from the N.E.A. office, Washington, D.C.

A.C.E.I. 1955 Conference Scheduled for April 11 to 15

KANSAS CITY, MO.—"Focus on Children" is the theme of the Association for Childhood Education International study conference to be held here April 11 to 15.

The conference will feature study groups for problems of mutual concern. James L. Hymes Jr. of Peabody College, Nashville, Tenn., will address one of the evening sessions on "Shared Responsibility for Providing a Good Environment for Children." Visits to schools and other centers for children in the Kansas City area and to historical places in the general vicinity are to be arranged.

School Construction Booms in San Diego, Calif.

SAN DIEGO, CALIF.—School construction here has boomed in the last four years. George H. Geyer, associate superintendent, reports that 943 new classrooms have been built since February 1951.

The district now has 2337 classrooms; 40 per cent of these were built in the last four years. There are 706 permanent classrooms; the remainder are portable. Other construction includes 26 assembly-cafeteria units, 5 cafeterias, 8 shower-locker units, 8 auditoriums, 3 gymnasiums, and 20 portable lavatory units.

Fels Fund Finances College Personnel Study

PHILADELPHIA.—The University of Pennsylvania has received a grant of \$25,000 from the Fels Fund for a study of policies and practices which help to build a strong faculty and good working conditions. David R. Goddard, professor of botany at the university, will be chairman of the study committee.

Members of the committee will investigate ways in which the most able faculty appointees may be obtained to fill university positions. The committee will also consider conditions and the climate of work that will attract and hold able men and ways in which a desire for excellence may become the goal of the entire university community.

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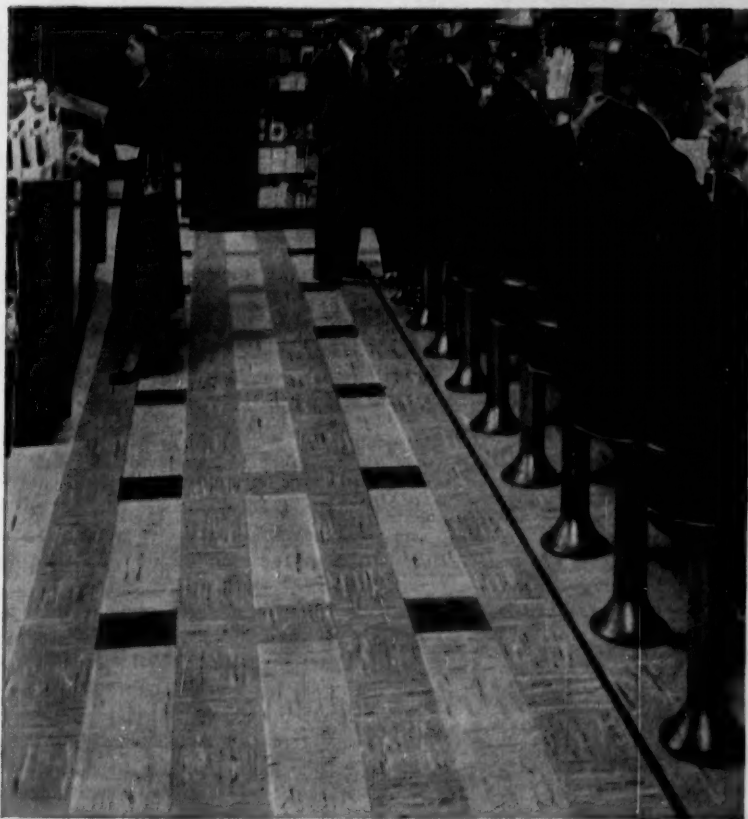
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NEWS

Colleges Urged to Stress Education for World Affairs

CHICAGO. — "Our universities and colleges should do more to help our citizenry respond rationally and responsibly to foreign affairs," Dorothy Fosdick, former member of the policy planning staff of the Department of State, told educators at the Conference on Higher Education here February 27 to March 2.

"The ordinary citizen does not have to be equipped to play the main rôle

of conducting foreign policy but rather to understand enough about what is involved to play an intelligent and helpful supporting rôle." What the average man needs, Miss Fosdick continued, is practical experience in putting himself sympathetically into the position of the responsible government official so that he may examine his own convictions and opinions about a specific situation.

"Not only the mentally disturbed and abnormal are out of touch with

reality, but, as far as world affairs go, the normal student is likely to be out of date or at least unaware of new facts coming up over the horizon. The rapid pace of contemporary events makes keeping up to date at best difficult," she said. Her challenge to colleges to educate world citizens was a high point of the meeting.

J. W. Fulbright, U.S. senator from Arkansas, expressed concern over compartmentalized education. It prevents people from establishing a common ground which will enable them to think and to talk to each other across the whole breadth of their knowledge and experience, he said at the final session of the conference.

"Specialization in this or that art and science is not an education for a democracy. There is nothing to distinguish it from totalitarian education. Specialization does not create an atmosphere in which the mind can be opened to every intimate impulse and voice, meshed with other minds of a like sort. I am pleading for the restoration of the humanities as the heart of any educational system."

Stressing the importance of teaching the humanities, the senator asserted that the colleges have failed "to keep intact, as a unifying reference point for the undergraduate body, a common intellectual tradition, a sense of an intellectual community leading to a sense of the continuity of human experience."

A widespread attitude of anti-intellectualism among the public and even among the colleges and universities is cause for grave concern, said Henry David, executive secretary of the National Manpower Council, Columbia University. He advocated early identification of ability, a drastic improvement in the quality of secondary education, a more effective program of educational and vocational guidance, and easier access to more equal educational opportunities in order not to waste the talent of gifted young people.

M. Eunice Hilton, dean of the college of home economics at Syracuse University, criticized the public's attitude that higher education is a luxury for the woman who intends to marry or that an educated woman is restless in the rôle of wife and mother. This, she said, has been responsible for a decrease in the number of women who have sought admission to colleges in the last few years.

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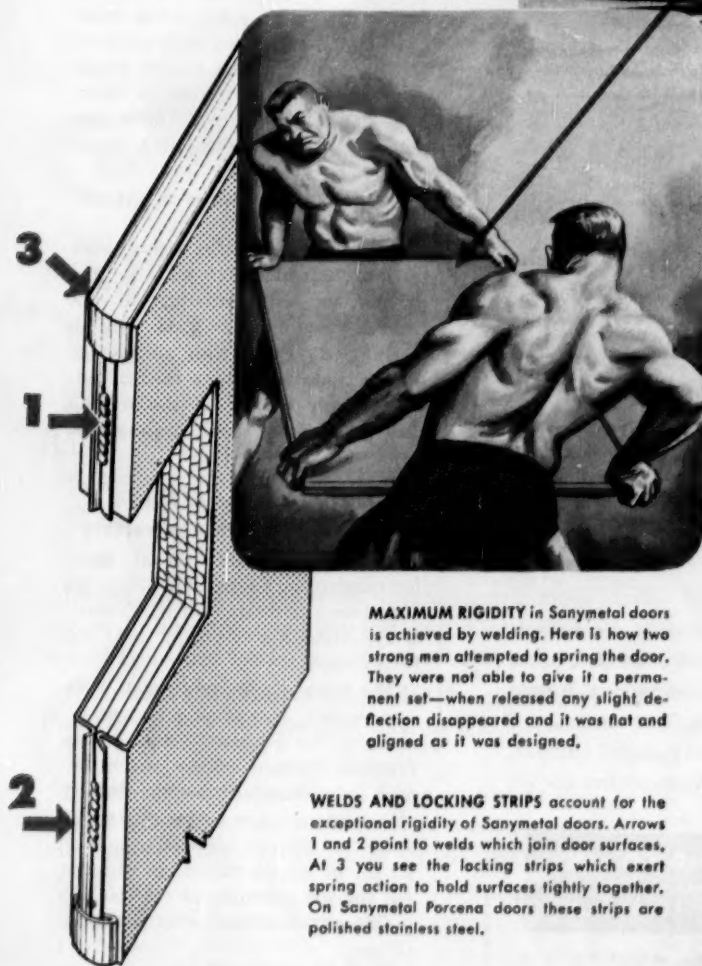
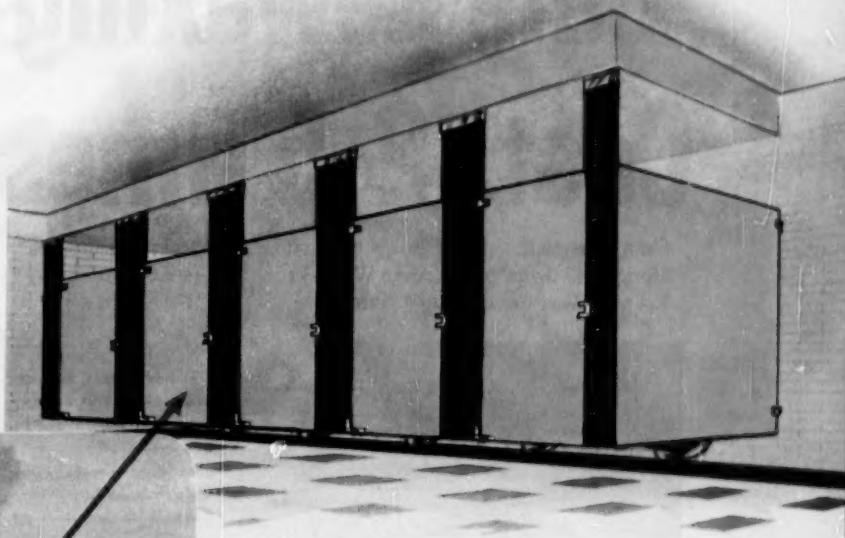
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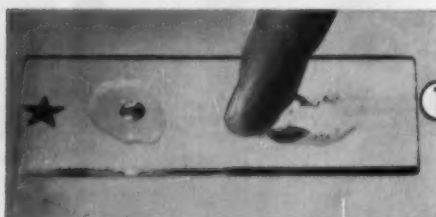
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NEWS

English Courses Need Emphasis on Skills of Writing

NEW HAVEN, CONN.—English courses offered in most American schools do not teach young people to write, said Edward J. Gordon, lecturer in English in the master of arts in teaching program at Yale University.

"Most high school grammar teaching," he said, "has little relation to the way the English language actually works." Students should be shown "how to combine ideas and to get rid of unnecessary words," and for this reason teachers should let students write and write and write. They should be encouraged to express themselves on the problems they face in growing up and on subjects they know firsthand. By assigning such subjects, Mr. Gordon said, "the teacher would be teaching grammar, would be teaching communication, and, most important, would be teaching these students how to think."

He also urged teachers to get students to like books.

One of the basic faults with English teaching, Mr. Gordon said, is that parents and administrators do not realize how difficult good English teaching is. Faced with an average of 150 students a day, a teacher cannot possibly correct all the writing that the students should be made to do, he concluded.

Commission Named to Plan N.E.A.'s Hundredth Anniversary

WASHINGTON, D.C.—A 21 member commission to plan the hundredth anniversary celebration of the National Education Association in 1957 has been chosen.

The theme for the centennial, Waurine Walker, association president, reports, is "An Educated People Moves Freedom Forward." Some of the subjects to be considered are the decisive rôle of education in a changing world, action to provide adequate education for the increasing millions of children, and the strengthening of the teaching profession in its service to people of all ages.

Parents and citizens throughout the nation will be invited to join with the N.E.A. during the centennial in dedicating themselves anew to the cause of educational opportunity for the growing millions of American school children, Miss Walker said.

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NEWS

Secondary School Principals Association Hears N.E.A. Position on Eisenhower Construction Bill

ATLANTIC CITY, N.J. — "Disappointment is the most kindly word that anxious parents and hard pressed school boards, administrators and teachers are likely to use to describe their reaction" to the federal legislation which has just been introduced for the aid of schools, said William G. Carr, executive secretary of the National Education Association.

Addressing the opening meeting of the annual convention of the Association of Secondary-School Principals here, February 19 to 23, Mr. Carr launched into a statement on "Critical Issues in Education." He concentrated on one issue—the proper rôle of the government of the United States in the education of its citizens.

"How substantial is [the govern-

ment's] help?" Not very, in Mr. Carr's opinion. "Newspapers . . . headlined this bill as the \$7 billion federal program. . . . Yet it needs to be said that the federal cash contributions are limited to cases arising under [the section of the bill which would provide grants to enable impoverished school districts to borrow money for construction or to rent facilities]." At most, he said, this would amount to \$70 million a year, or \$210 million in three years. All the remainder of the widely discussed \$7 billion would be provided by states and localities.

"The sum of \$70 million would build about 2400 classrooms. The deficit in classrooms is currently about 300,000, according to the commissioner of education. Thus in each of the next three years the federal grants would reduce this deficit by 0.8 per cent."

Criticizing the fact that the government has not acted to help directly in the school situation, Mr. Carr stated that N.E.A. policy on the rôle of the government in education "calls for substantial federal grants distributed according to an objective formula through the regular state educational agencies. It calls for clear written guarantees that educational policy remain in the states and communities."

"Other functions of government," Mr. Carr continued, "notably highways, but not exclusively highways, have continued to demand and to receive more and more federal money." This federal aid to the states is on a matching basis, which "tempts the states to allot funds to these favored purposes because they can get a federal dollar for every dollar of their own."

"Our government has also inaugurated a splendid, far-flung program of aid to education in other countries. We are sending some of our best teachers and educational leaders to distant lands to lay the educational foundations for national freedom and prosperity. But at home education has been largely ignored by our national government," Mr. Carr said.

"School buildings are getting older, teachers are not getting any younger, and the supply of new teachers continues to dwindle."

The 4000 principals who attended the convention drafted their thoughts on the aid to education bill into a proposal:

(Continued on Page 136)



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Name of School _____

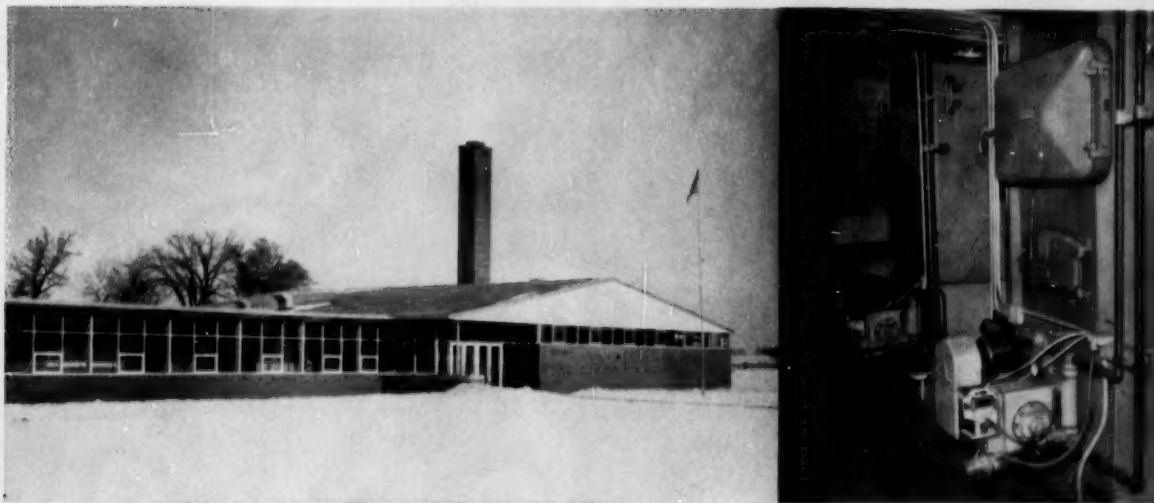
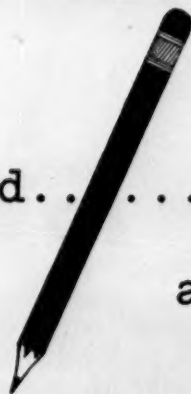
Street _____

City _____ State _____



How a school

planned ahead... avoided buying
an extra boiler



Architect: Warren W. Kane, Austin, Minnesota;
Engineer: Richard W. Evans, Minneapolis, Minnesota;
Heating Contractor: P. J. Gallagher & Sons Company,
Faribault, Minnesota.

KEWANEE

reserve + plus
rated boilers . . .
Meet Future Expansion Needs

Architect Warren W. Kane and R. W. Evans, Consulting Engineer, faced two heating problems in designing the Brownsdale Consolidated School, Brownsdale, Minnesota:

- (1) Providing enough heat for health and comfort during rigorous winter days;
- (2) Assuring sufficient reserve power to heat 4 additional classrooms a census study indicated for the future.

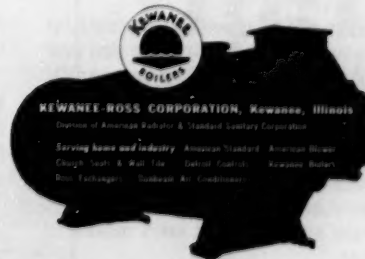
Solution: 2 Kewanee Reserve Plus Rated Boilers with 50% extra power built in to meet the emergencies of today and the demands of tomorrow.

Present Result: The first Minnesota winter passed with adequate heat, even though windows were single glass without storm protection.

Future Result: No need to install an extra boiler to heat 4 additional classrooms, since Kewanee Boilers are rated against nominal capacity with reserve to meet expansion needs.

Moral: To school systems—Avoid selecting boilers rated against maximum capacity. They lack reserve for future growth.

Moral: To anyone concerned with the specification of boilers—Don't be lured by false promises of economy or "first cost" of under-powered boilers . . . those adequate to meet only average needs. Select Kewanee Reserve Plus Rated Boilers with sufficient reserve to provide for fluctuating loads, emergencies and expansion.



YOU can depend on KEWANEE engineering

Only Trane KB* Unit Ventilators

no matter



A Trane Unit Ventilator with Kinetic Barrier* action operates every minute room is occupied . . . stops drafts, ventilates every corner uniformly, ends stale-air spots! And . . . it's whisper quiet!

Modern walls of glass have opened up the classroom . . . invited the sun and the light . . . and chilling downdrafts!

Yes, modern schools have actually created a problem: A steady stream of icy air flowing down along walls of glass, over the sill and into the classroom. Drafts that can annoy and chill, not just now and then, but *every minute* of the day.

Therefore, any system designed to stop this flow of cold air must operate,

not just now and then, but *every minute* the room is occupied.

TRANE—and *only* TRANE—has the Unit Ventilator that does this. TRANE's draft-stopping Kinetic Barrier action operates *full-time . . . even when the heat is off!*

Actually, the "blanketing" of windows during the *heating* cycle has been common practice for years. But this still leaves pupils exposed to downdrafts since *cooling* with outside air is required

about 75% of the time, even in winter. There must be a full-time draft barrier. And only TRANE has it!

What's more, since the special fans in this unit operate full-time, the air delivered from the wall-to-wall wing ducts is under *constant pressure* for truly *uniform* ventilation. Cold corners, stale-air spots—gone like that! And since these fans are *low-velocity* fans, they're actually *whisper quiet*!

For full details have your architect, engineer or contractor contact his nearby TRANE Sales Office, or write TRANE, La Crosse, Wis.

**Kinetic Barrier refers to the wall of continuously upward-moving air provided by TRANE KB Unit Ventilators. This action reverses window downdraft, induces flow of room air, blends it with main air stream from unit.*

stop drafts all day long...

whether the units are heating, ventilating, or cooling!



EVERY FEATURE FOR LOW MAINTENANCE, QUIETER OPERATION, LASTING BEAUTY!

● **Rubber dirt seal** on back of unit and felt pad under unit seal out dirt, prevent heat streaks.

● **Removable panels** give easy access to all 3 sections. Simplify servicing, cleaning.

● **Trim intake boxes** of aluminum, anodized aluminum or copper give attractive exterior walls.

● **Exclusive bearing-shaft** arrangement assures unusually quiet operation.

● **Resilient motor mounts** help stop noise, vibration—assure smooth operation.

● **Low velocity fans** are unusually quiet, deliver large quantities of air.

● **Baked on finish** is extremely resistant to scuffs,

bumps and kicks. Always attractive.

● **Decorator styling** adds beauty to any room. Available in six colors or finished with prime coat.

● **Color-keyed tops** of standard gauge linoleum available in six colors. Pick up color scheme of room, blend with or complement TRANE standard finishes.

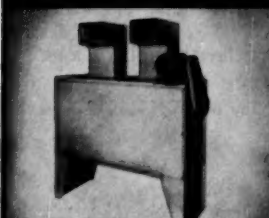
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Ltd., Toronto • 90 U.S. and 15 Canadian Offices

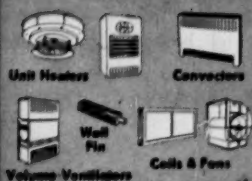
TRANE TORRIDOR delivers large volumes of heated air long distances, with or without ducts.



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NEWS

(Continued From Page 132)

"The proposed Administration school aid bill is deemed inadequate to meet the crucial needs in education.

"It is also a threat to the long established concept of local and state control of educational policies and procedures because:

"1. There is an apparent plan of delay in enacting fundamental and substantial legislation to meet the current school needs.

"2. The loan program for school construction increases federal control of educational administration.

"3. The total loan and grant proposal for financial aid seems unrealistic and impractical in view of the established needs of presently distressed school districts."

In a major convention address, Hollis Caswell, president of Teachers College, Columbia University, told the principals, "You are participating in one of the greatest of... social experiments. The experiment to which I refer is the provision in a common school system, extending through the period of secondary education, of educational opportunities for all children and youth regardless of ability, class or religious belief."

The peoples of the world look to the United States for leadership in education but also look at our schools with a critical eye for weaknesses, Dr. Caswell warned. "The way in which our educational practice stands up under this appraisal will influence greatly the struggle between democracy as we know it and communism."

Critics want to know "whether our secondary schools can develop intellectual achievement on the part of gifted pupil comparable to the achievement of similar pupils in selective secondary schools. . . . It has been asserted frequently that our [high school] curriculum is pitched pretty much to the average and below average. . . . In all fairness it must be admitted that there is considerable truth in such statements. . . . The plain fact is that in the modern world high-level intellectual achievement is of supreme importance. . . . Consequently the failure of an educational system to cultivate fully the talented and able is a matter of great seriousness.

"The climate that pervades our schools does not place a premium on intellectual achievement. The football and basketball stars are the school

heroes and upon occasion the student who does more work than is necessary to pass is dubbed a 'dope' by his fellows. . . . There is, I fear, a tendency in this country to deprecate the intellectual, and this attitude influences the schools."

Dr. Caswell admitted there was much justice in the criticism that school programs in general are geared "to a more or less mythical average and really fail to meet the needs of any pupils very well." However, he added, when the curriculum today is compared with that of 20, 30 or 50 years ago in terms of meeting the needs of all youths, the improvement is unmistakable.

"Our conception of secondary education as an integral part of the common school is an innovation of major proportions" which, Dr. Caswell asserted, "is distinctive, having achieved acceptance to only a very limited extent outside our own country. . . . There is still no nation in Europe or Asia that has an educational system in which secondary education is conceived as part of the common school."

"Teachers Wanted" in flashing neon may be the new decoration on every high school by 1957, said Waurine Walker, president of the National Education Association, pointing up the need for action on the problem of the inadequate supply of teachers.

Every high school principal, said Miss Walker, has an important rôle in recruiting teachers by seeking out future teachers among his students and by encouraging them to take professional training.

Evaluation is also necessary, Miss Walker asserted. "We need to do some studies among our high school students to find out why they are or are not interested in a career as a teacher."

Nor is finding new teachers enough: "If any type of recruitment is to be realistic it should start with a deliberately designed plan to retain in service those good teachers now in the classroom. . . . Furthermore, high school principals can ill afford to allow failure of a new teacher," Miss Walker said.

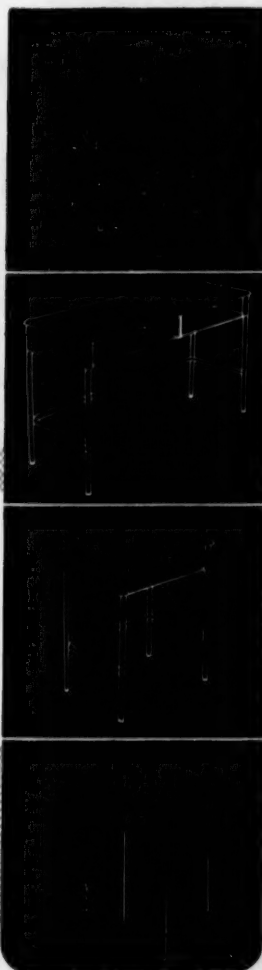
Leland N. Drake, principal of Mohawk Junior High School, Columbus, Ohio, was elected president of the association. His term of office began March 1. First and second vice presidents are, respectively, George L. Cleland, secondary school consultant, state

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WESTMORELAND selected hard maple and plywood seats and tops are finished with famous CELSYN tough, scratch resistant wood finish. Metal Parts may be Taupe, Turquoise, Coral, Blue, or Polished Chrome Finish.



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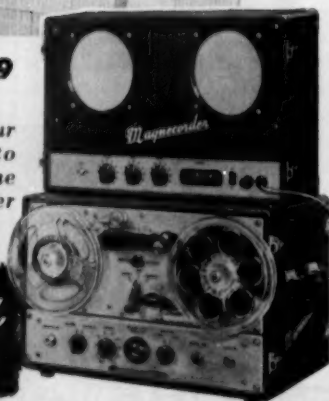
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NEWS

department of education, Topeka, Kan., and R. B. Norman, principal of Amarillo Senior High School, Amarillo, Tex. Named to the executive committee were James E. Nancarrow, principal of Upper Darby Senior High School, Upper Darby, Pa., and Cliff Robinson, director of secondary education, state department of education, Salem, Ore.

Dr. Conant Says World Scene Makes New School Task

EAST LANSING, MICH.—The greatest influence on educational thinking in the next half century will be the new position of the United States as a world power in a contracted world, said James B. Conant, U.S. high commissioner for Germany.

Speaking at centennial ceremonies at Michigan State College, Dr. Conant pointed out that, as the United States is the acknowledged leader of free nations, it is necessary that our schools and colleges be more concerned with international affairs. Specifically, he said, this means greater emphasis on American history. But he believes that foreign policy requires as much attention. "Our future citizens must know what it means to know thoroughly a friendly or a hostile neighbor. We must . . . avoid optimistic sentimentality on the one hand and hopeless cynicism on the other."

Dr. Conant emphasized that, although America need not retreat from the goal of providing education for all American youth, it is under an obligation to single out at an early age those who have special talents and tastes for work with people of foreign lands and to provide educational opportunities for the development of these young people.

"When I attempt to sum up for Europeans American education in terms of American idealism," said Dr. Conant, "I say the development of our schools and colleges has been motivated by our desire to move constantly toward two goals—equality of opportunity for all youth, equality of respect for all honest citizens."

Massachusetts' First Regional High School Now Open

HOLDEN, MASS.—Wachusett Regional High School here is at the center of a new kind of school district in Massachusetts. In the summer of 1950 the towns of Holden, Paxton,

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NEWS

Princeton, Rutland and Sterling began to organize a new high school district which would consolidate educational facilities, Gordon M. Thomas, principal, explained. Previously students in the five towns had been attending separate high schools in three of the towns.

The new building has been located on a large plot of ground in Holden, which is approximately the geographic and population center of the district. About 90 per cent of the 760 students

come to the Wachusett school by bus, Mr. Thomas said. Each town is responsible for providing transportation for its own students.

Suburbs Take Emergency Steps to Keep Classes Small

NEW YORK.—In the face of increasing enrollments suburban superintendents are taking a variety of emergency measures to keep classes small, reports the Metropolitan School Study Council. The council is an

affiliate of the Institute of Administrative Research, Teachers College, Columbia University.

One solution has been to convert manual training shops and other special rooms into classrooms, the report noted. These other rooms are generally science rooms, laboratories and music rooms. This represents a backward step for many systems since it deprives students of these educational opportunities, the report stated.

The use of substandard rooms is given as another remedy for overcrowding, but the physical conditions in these rooms are often poor and not conducive to study.

Shifting pupils to less crowded schools by redistricting and by apportioning certain age groups to certain buildings is the third measure often taken. The council found that parents often object to this system as it may mean that children have to travel greater distances and encounter increased traffic hazards.

Part-time school and double sessions which deprive pupils of a full education and place an undue strain on teachers are poor solutions to the problem, the report stated. They tend to disrupt home life as well as orderly school procedures. They also present health and safety hazards for the teachers.

The council recommended these measures for coping with the situation: changing pupil attendance lines between schools, transferring individual children to less crowded classes in other schools, or transferring a whole class of children to another school. The ideal solution, of course, is more schools, the report said.

Industries Cooperate in Job Program for Science Teachers

WASHINGTON, D.C.—Summer vacation employment for high school teachers in industrial plants is part of a program sponsored by industrial companies because they believe these teachers are in a strategic position to encourage young people to seek technical careers.

Sponsored by the National Science Teachers Association and science related industries and engineering firms, the informal program encourages teachers to take summer positions in laboratories and factories during the summer months. In this way teachers

(Continued on Page 144)

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THE RECREATION LINE PLAYGROUND EQUIPMENT

Now children play safely on durable Recreation Swing Sets, designed to meet your playground needs. These rugged Swing Sets feature 2" top rails and 1½" pipe uprights with oilless swing bearings. A short span frame is designed to assure adequate swing separation.

Here's a welcome, low-cost addition to any playground—Recreation's Outdoor Fan-shaped Metal Basketball Outfit with 4' extension. The metal backboard and extension are supported by two heavy 3" hot galvanized steel pipes, connected by a 2" steel pipe frame.



Take it from Rufus, the Guardian Angel, Recreation's new rubber Swing Belts eliminate swing injuries and dangerous falls.

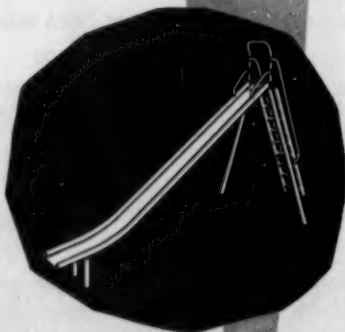
The durable construction of Recreation's All-Metal Land Slide with its sturdy structural steel supports and ladders, high guard rails, and heavy-duty chutes insures years of safe, trouble-free service.

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Chalk "flows on" with minimum pressure due to micro-fine, super-hard, "suede-coated" surface which also facilitates erasure; eliminates ghosts.

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Never needs replacement due to age... will not become shiny in a lifetime of normal use; cannot fade... completely resistant to moisture... cannot warp.

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Features Within the Means of All! New
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Auto-Lok windows are engineered to provide schools with every important quality required for this special use. Countless successful school installations, continuing work with the architects of hundreds of America's most modern schools, and the specialized skills gained through designing and producing windows for outstanding public buildings . . . all contribute to Ludman's leadership in school window installations.

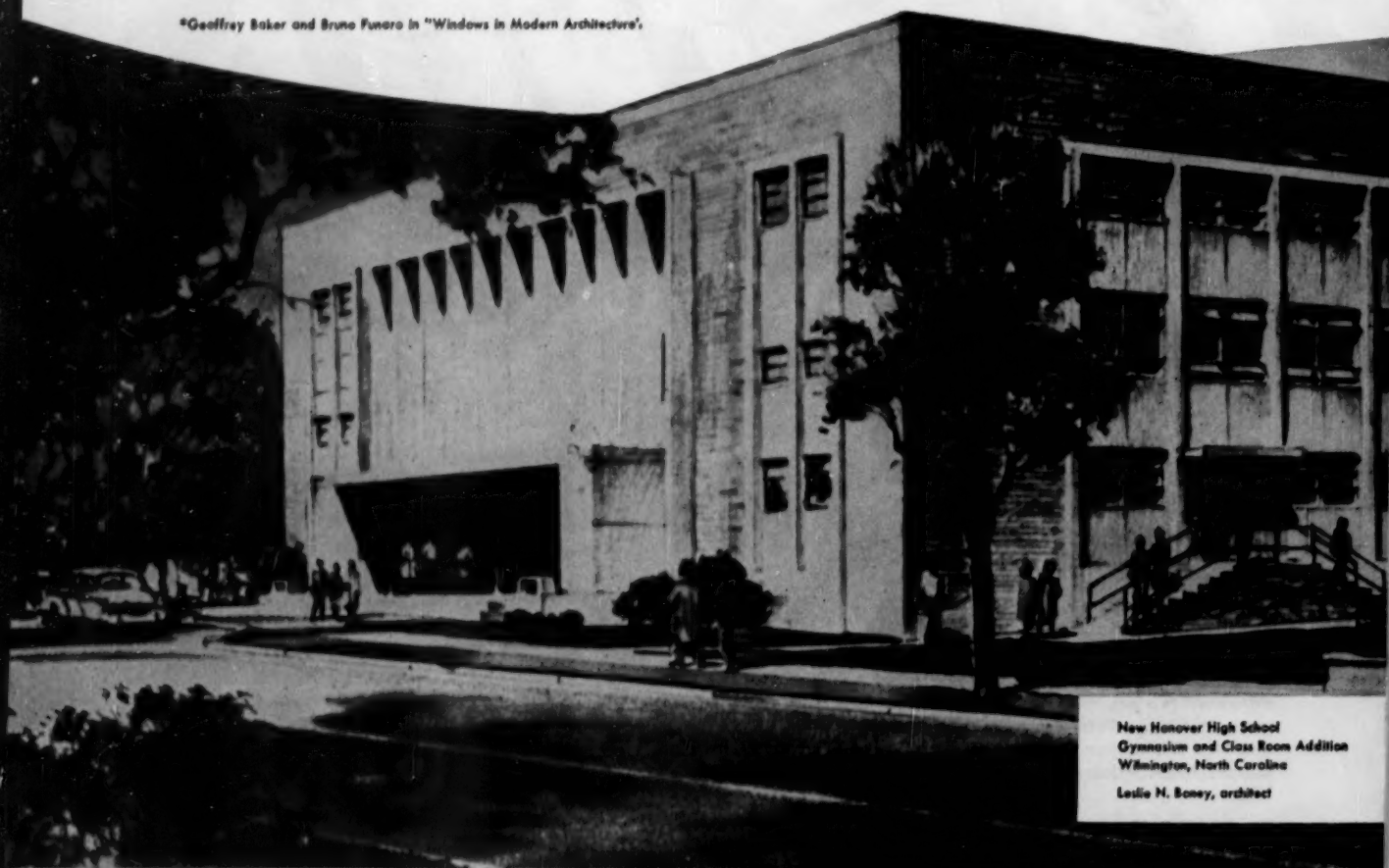
The coupon will bring you, in full detail, the information you need to look ahead in your selection of school windows. To learn why Auto-Lok windows meet the ten most important requirements that experts* agree are really important in a window . . . to learn how Auto-Lok windows insure healthful fresh air, even when it's raining . . . to learn of such savings as reduced fuel costs . . . to learn how you save with windows that are washed from the inside . . . send the coupon today.

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*Geoffrey Baker and Bruno Finaro in "Windows in Modern Architecture"



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Gymnasium and Class Room Addition
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Leslie M. Boney, architect

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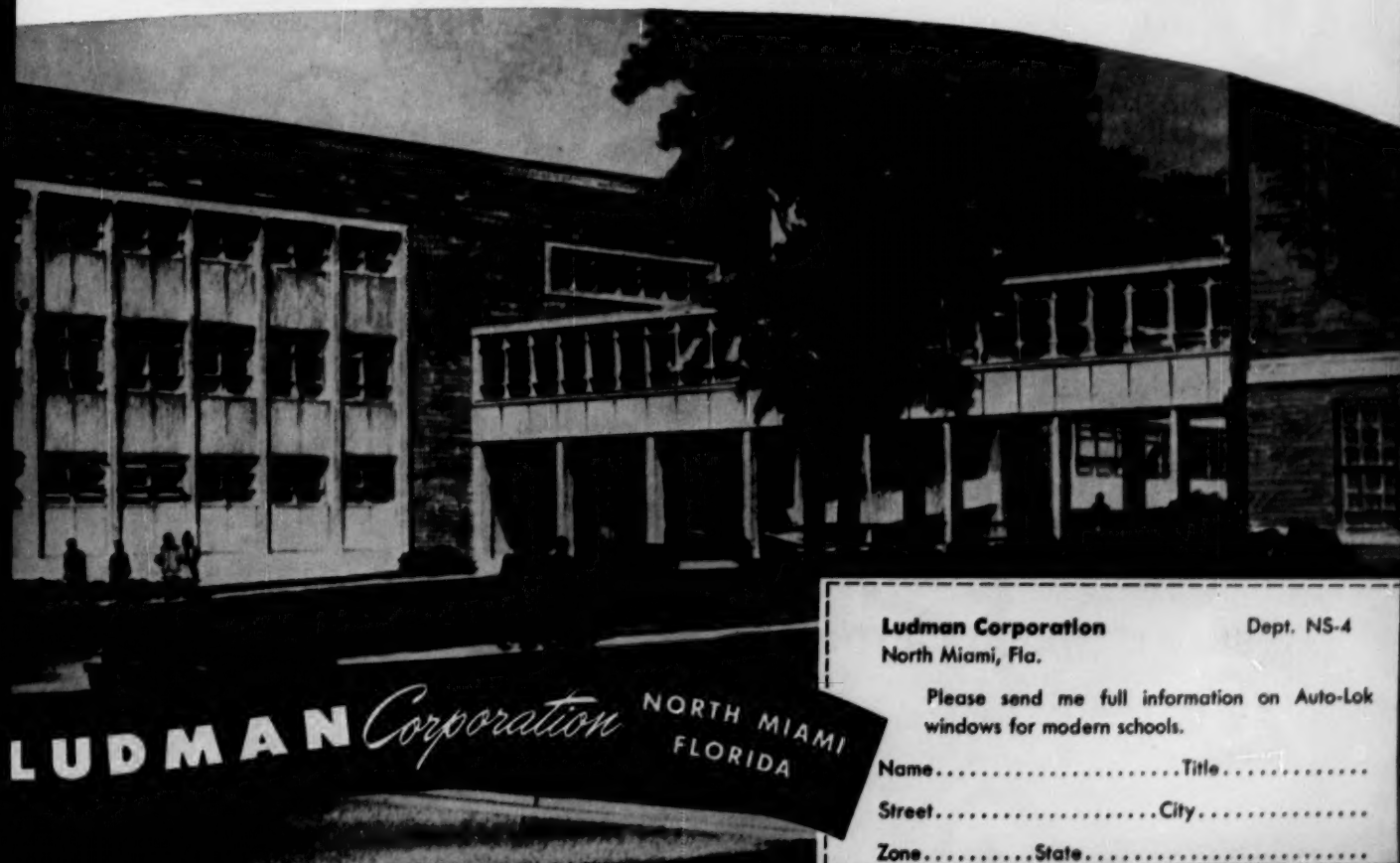
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The World's Oldest and Largest Manufacturer of Stainless Steel Sinks . . . since 1920

NEWS

(Continued From Page 140)

may broaden their knowledge and appreciation of what is involved in becoming a professional scientist, explained Robert H. Carleton, secretary of N.S.T.A. "Science teachers for the most part look upon summer jobs in industry as refresher courses not only in their field of specialization but also in the area of guidance and counseling of the students," he said.

Science teachers recognize their responsibility for encouraging students to consider scientific careers and are willing to cooperate with industrial and scientific groups to make their school science classes practical and realistic, said Mr. Carleton.

Religious Classes Taught During Noon Hour

BANGOR, MICH.—Religious instruction over sandwiches and apples is a novel experiment in the public school here. Clergymen from eight denominations are each conducting classes on religious subjects for 45 minutes during the noon hour.

About 100 of the 280 high school students have been attending. Teachers take no part in the program.

The plan was suggested in a speech made to the Kiwanis club last fall by the Rev. Robert Taffee, pastor of Sacred Heart Roman Catholic Church. The program was later approved by the board of education, reports Supt. Homer Hendricks.

Ohio C.P.E.A. Holds Review Conference

COLUMBUS, OHIO.—A state council for service and research in problems of school administration was suggested at a review conference of the School-Community Development Study held recently at Ohio State University. The conference, sponsored by the Cooperative Project in Education Administration, was attended by educators and other persons throughout the state, as well as by representatives of other C.P.E.A. centers.

The proposed council would be in a position to diagnose state problems of school administration, muster the resources and skills needed to cope with these problems, and carry on research programs. Furthermore, the council would provide continuity in the school administration programs of the various educational associations of the state, the conference report stated.

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From Kindergarten Pupils **PITTSBURGH COLOR**

Accelerates Learning Processes and Improves Behavior Patterns

The magical thing about Pittsburgh COLOR DYNAMICS in schools is the measurably beneficial effect this painting system has on behavior and performance patterns of pupils of all ages.

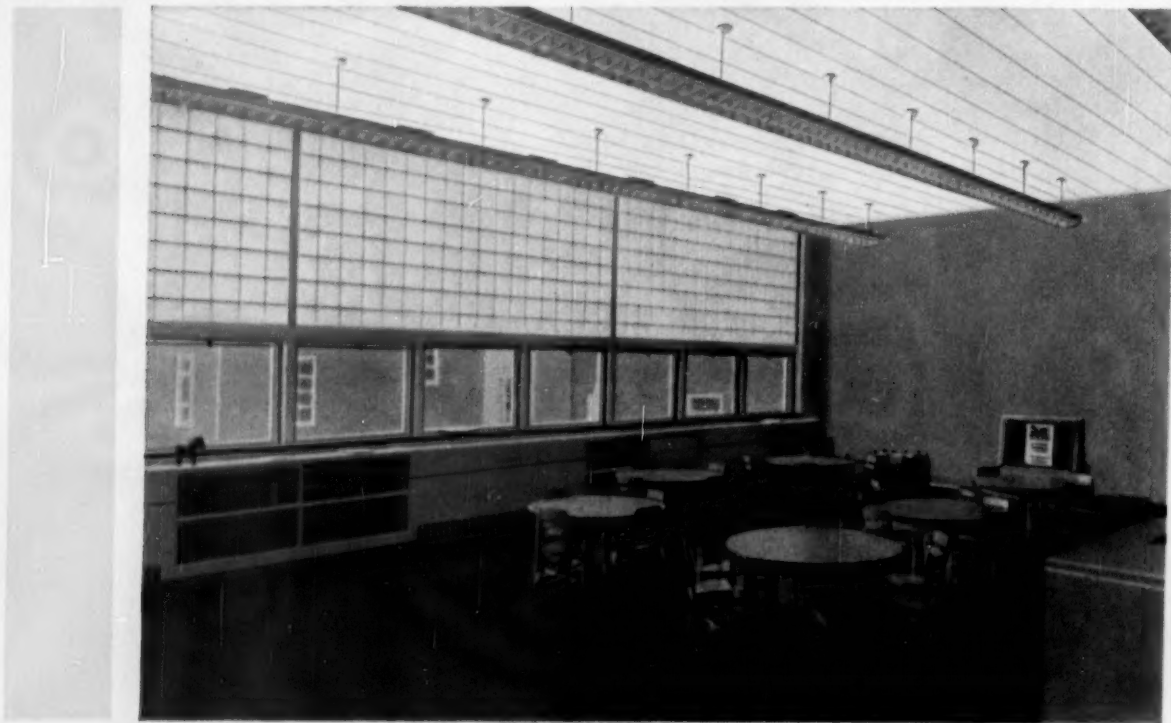
A scientific two-year study of the effect of COLOR DYNAMICS on 2,500 school children in Baltimore has produced substantial evidence that color environment affects scholastic achievement and physical well-being.

Essentially, COLOR DYNAMICS is a method of decorating in which the colors selected for each classroom suit the design, and the lighting of these areas and the people and the activities which they house. When painted according to the principles of COLOR

DYNAMICS, each room, corridor and stairwell is treated individually—some brightly to improve the lighting, many in mixed colors to increase the interest of pupils. Younger children respond to bright colors, while older students, more in need of calming influences, are given pastel shades and soft harmonies.

With COLOR DYNAMICS, you can also use color to create desirable changes in appearance. Rooms can be made to seem more spacious, ceilings to look higher or lower, halls to appear to be brighter and wider.

Why not discover for yourself how COLOR DYNAMICS can create a whole new world of helpful color to accelerate learning processes and improve behavior patterns in your school?



Many youngsters begin their school careers in the kindergarten. It is important that such rooms be bright and cheerful. Here is an example of a pleasant room in which a light value of warm wall color counteracts the effect of cool light from north and east.



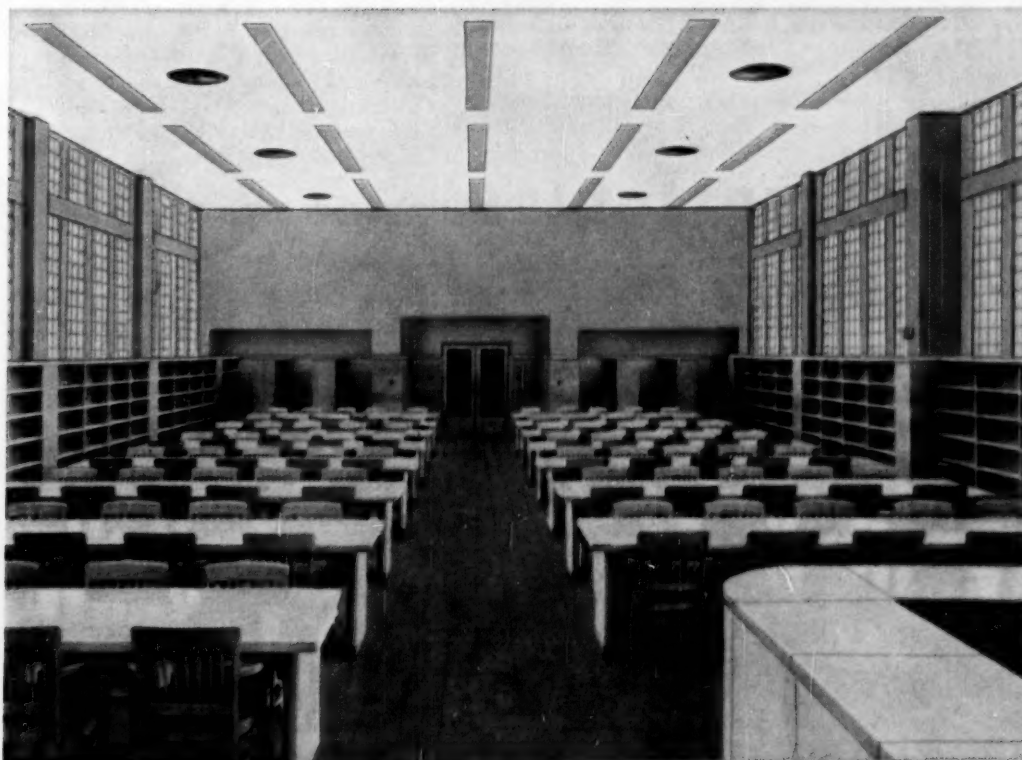
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☐ Please have representative call for Color Dynamics Survey without obligation on our part.

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NEWS

Dr. Clish to Leave San Francisco, Become Superintendent in East

SAN FRANCISCO.—Herbert C. Clish, superintendent in San Francisco since 1947, has resigned, effective July 1, to become superintendent at Lynbrook, N.Y. He will succeed H. Arthur Shubert, who is retiring.



Herbert C. Clish

Upsetting a precedent in the San Francisco school district—no superintendent in many years had been asked to serve more than one term of office—Dr. Clish has had three contracts and was recently offered a fourth.

Because they are natives of the East, he and his family are interested in returning to that section of the country, Dr. Clish said. He has also expressed the desire to serve in a smaller school district where he will be able to have more personal contact with the staff

and program of the schools than is possible in a large city.

Before going to San Francisco, Dr. Clish served as superintendent at New Rochelle, N.Y., for seven years.

Ways Proposed for Schools to Help Gifted Children

NEW YORK.—Ways in which schools may enlarge the educational opportunities they offer gifted children have been proposed by the council on the readjustment of high school education of the New York State Board of Regents.

In a pamphlet, "Bright Kids—We Need Them," the council sets out basic considerations:

An effort should be made by the teacher to match learning activities to the level of the student instead of matching the student to the level of the class.

Schools should give specific responsibility to one person on the staff for discovering ways to give bright children more adequate opportunities.

The "bright kids" should receive their fair share of the teacher's time.

Accurate and tactfully presented information should be given to the public about talented youngsters in order to correct erroneous ideas prevalent about children who have above average ability.

More Money Spent for Comic Books Than for Textbooks

BERKELEY, CALIF.—Comic books are a bigger expense to the U.S. public every year than are textbooks for all of the nation's elementary and secondary schools, according to a University of California survey. Results of the study were issued by the U.S. Bureau of Public Administration.

The sale of comic books reached one billion last year, the report states, which represents a sale of \$100 million. This amount, the report points out, is four times the combined annual book purchasing budgets of all the public libraries in the country.

Who reads them all? Comic book readers cover a wide range, the survey showed. Comics readers are not confined to any particular level of intelligence among children, nor are comics read only by children. According to the study, comic books are read by 25 per cent of adult high school graduates, 16 per cent of adult college graduates, and 12 per cent of the nation's teachers.

Strong Folding Tables by HOWE

Howe folding tables are especially designed for comfortable seating and rugged wear. They're light, strong—and practically indestructible. They fold smoothly and compactly—take up minimum space when not in use.



HOWE
Square Leg
Table

All steel chassis. A brace at each leg for extra strength and a leg at each corner for engineering balance. Riveted and welded throughout. Choice of several different tops and sizes.

All steel chassis with retracting leg fold. Strong, fool-proof lock with self-tightening principle. Two separate braces for each pair of legs. Braces are riveted to chassis. Choice of several different tops and sizes.



New
HOWE
Pedestal Leg
Table

This revolutionary folding bench and table unit is a wonderful convenience for cafeteria, classroom and many other uses. Converts quickly into a bench with back rest, or a two tier "bleacher." Folds automatically and can be moved with ease. No more lifting or lugging. It literally "floats" along.



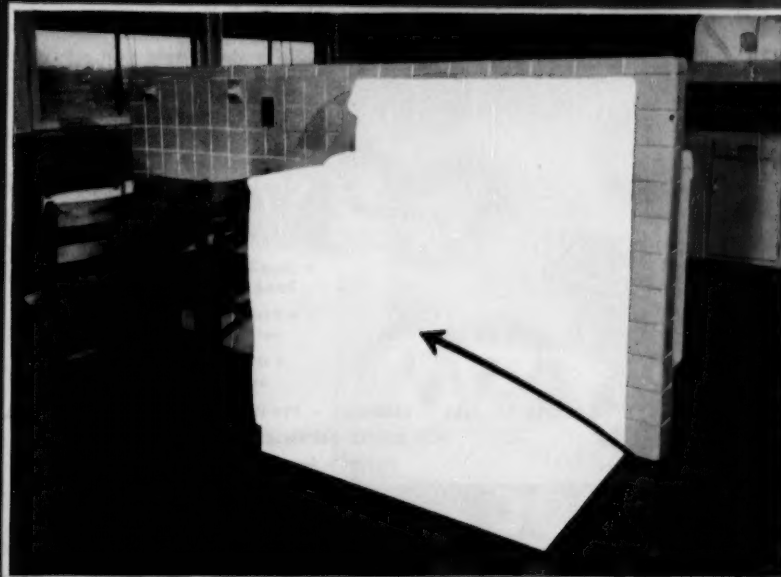
New
HOWE
Bench and Table
Combination

Dimensions: Table—30" x 72" x 27" high. Benches—9 1/2" x 72" x 16" high. Folded position—17 1/2" x 72" x 38 1/2" high.

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Information on how to provide your school with modern, automatic *Electric Ranges* may be easily obtained from your electric light and power company or electric appliance dealer.

Floor Plan Booklet—This booklet can help you, whether you're installing new ranges, remodeling the school's home economics laboratory, or planning a new school building. It serves to crystallize

your thinking on what your own laboratory should include, provides ideas on layout and arrangement based on what has been done in other schools. Mail the coupon for your **FREE** copy!



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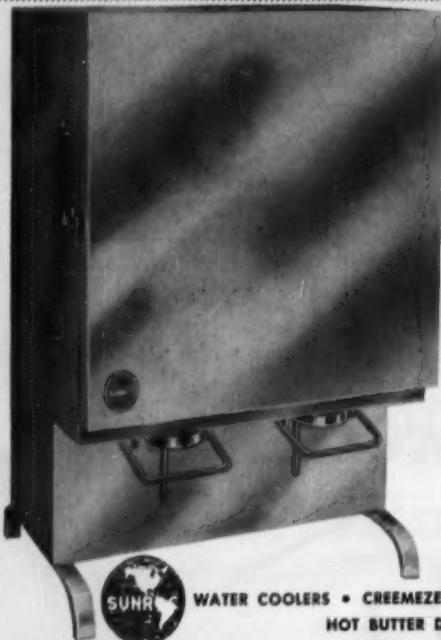
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NEWS

Company Offers Schools 10 per Cent of Local Tax Bill

NEWBURGH, N.Y.—The New York Trap Rock Corporation has announced the donation of a grant to improve education in the public schools of the six communities along the Hudson River in which it operates its quarries and offices.

The towns of Clarkstown, Haverstraw, Tompkins Cove, Wappinger's Falls, Verplank and Newburgh have been offered the grants, which will total \$6250, Wilson P. Foss, president of the corporation, said. This amount, he explained, represents 10 per cent of the corporation's local tax bills.

Mr. Foss expressed the hope that the boards of education in these and other towns might be able to persuade other companies or individuals to join in this undertaking. His company plans to make an annual gift to the school boards, the amount depending on the year's profits.

The corporation president proposed a variety of uses for the money to raise the "general level of teaching in the public schools." The funds might be used to raise teachers' salaries, to hire additional teachers, or to employ specialists in workshops, remedial reading, or the education of mentally or physically handicapped children. Or the boards might prefer to use the money to give scholarships to teachers taking advanced training or to grant sabbatical leaves or travel leaves with pay.

Schools Need to Prepare Students for College Science Courses

CHICAGO.—"Many high school students when approaching graduation decide that they would like to pursue science or engineering in college but find, too late, that they do not have the prerequisite courses," John T. Rettaliata, president of Illinois Institute of Technology, told the Chicago Guidance and Personnel Association March 7.

Students who are interested in science need an adequate high school program, Dr. Rettaliata asserted. An "adequate" program, as he describes it, tends away from the trend toward general education which, he declared, does not prepare students for technological studies in college. Dr. Rettaliata's proposed curriculum would include a minimum of three units in mathematics, two in science, three in English, and one in history.

Business and industry can assist in

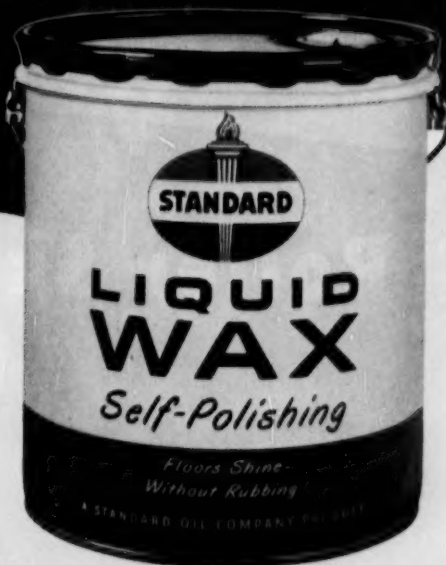


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Self-polishing! Fast drying. Easily applied with mop or pad to linoleum, rubber tile, asphalt tile, composition and hardwood floors. STANDARD Liquid Wax requires no buffing. It shines in minutes, holds its gloss and resists the roughest wear for weeks.*



Call or write for expert advice!

If you have a special problem that calls for expert advice on the use of STANDARD Floor Maintenance Products, contact your Standard Oil Sales Representative through the nearest Standard Oil Sales Office listed here. He can also arrange for immediate and dependable delivery from a nearby warehouse—one of more than 3,900 in the Midwest.



Produces a hard, waterproof permanent seal for wood, cork, masonite, hard mastic and concrete floors. Resins and gums in STANDARD Penetrating Sealer go deep into the flooring material to form a non-gloss, non-slip base for perfect wax or finish application. Approved by Maple Flooring Mfrs. Ass'n.*



STANDARD Ultra Finish provides a tough, high-gloss, non-slip finish for gym and other wood floors. Also for cork, magnesite, and concrete floors. Easily applied, dries quickly—resists boiling water, mild acids, rubber burns, heat and cold. Use it to refinish desks, tables and other furniture, too. Approved by Maple Flooring Mfrs. Ass'n.*

STANDARD Liquid Gloss (formerly SEMDAC) cleans and polishes in one operation. For oiling unfinished floors and woodwork, apply with mop or sprayer. To restore the luster and conceal scratches on furniture, apply with a soft cloth. Contains no abrasives. Each application lasts for months.*

*STANDARD Floor Maintenance Products meet all Underwriters' Laboratories requirements for floor treatment materials.



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NEWS

the problem of directing students toward technological careers by offering science teachers and students opportunities to visit plants and laboratories to witness the application of scientific principles, he said.

Researchers Study Training of Mentally Handicapped

URBANA, ILL. — What training should be given mentally handicapped children to make them as happy and as useful as their capabilities permit?

According to Professor Samuel A. Kirk, director of the Institute for Research on Exceptional Children, University of Illinois, the biggest obstacle to expanding the program for retarded children is not lack of public interest but the shortage of highly trained personnel to conduct these studies.

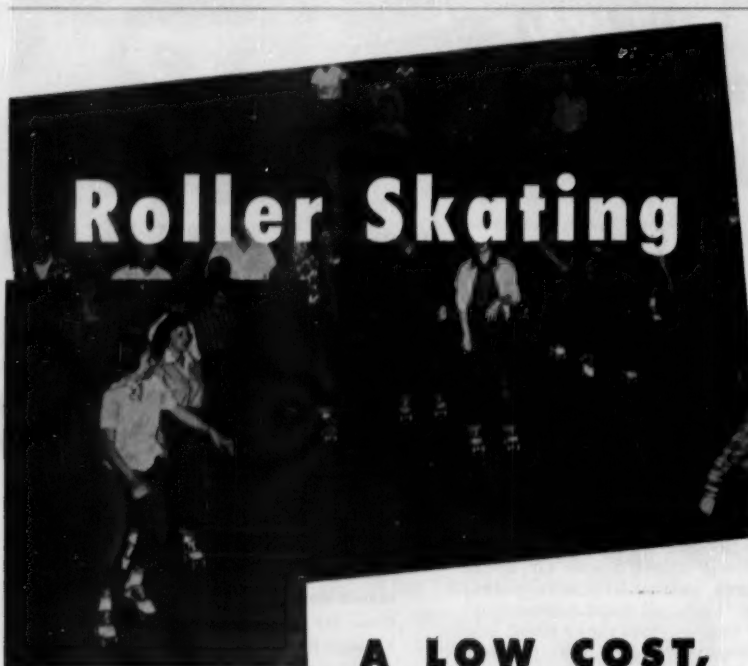
The research projects on mentally handicapped children now in progress under university supervision are:

1. Trainability of mentally handi-

capped children in the public schools, a two-year study for the state office of public instruction, now in its second year.

2. Trainability of mongoloid mentally retarded children, a study conducted at the Lincoln State School.

3. Trainability of brain-injured children, a study conducted at Dixon State School to determine whether these children can profit from intensive instruction based on thorough diagnosis.



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Ford Foundation Grants \$50 Million for Faculty Salaries

NEW YORK.—Salaries of faculty members in selected private colleges and universities are to be increased through a grant from the Ford Foundation. A sum of \$50 million has been designated for this purpose.

Each school that is selected will be asked to match the gift, Henry Ford II, chairman of the board of trustees of the foundation, announced. Varying ratios of matching funds are to be arranged. The funds will not necessarily be applied directly to increasing salaries; schools may put the grant money into endowment funds earmarked for higher faculty pay. However, the funds may not be diverted to other educational purposes.

The colleges and universities which are to receive portions of the grant have not yet been chosen.

Race Integration Pushed in Military Post Schools

WASHINGTON, D.C. — Plans to integrate schools on military posts by September are being pushed ahead in spite of the delay in the Supreme Court on the segregation cases, Defense Department officials reported.

In January 1954 Charles E. Wilson, Secretary of Defense, ordered all schools on military posts to be integrated as soon as practicable and not later than September 1955. There are 21 of these schools. Segregation has continued until the present in 17 of the schools. Two schools have been integrated, and two have recently been closed.

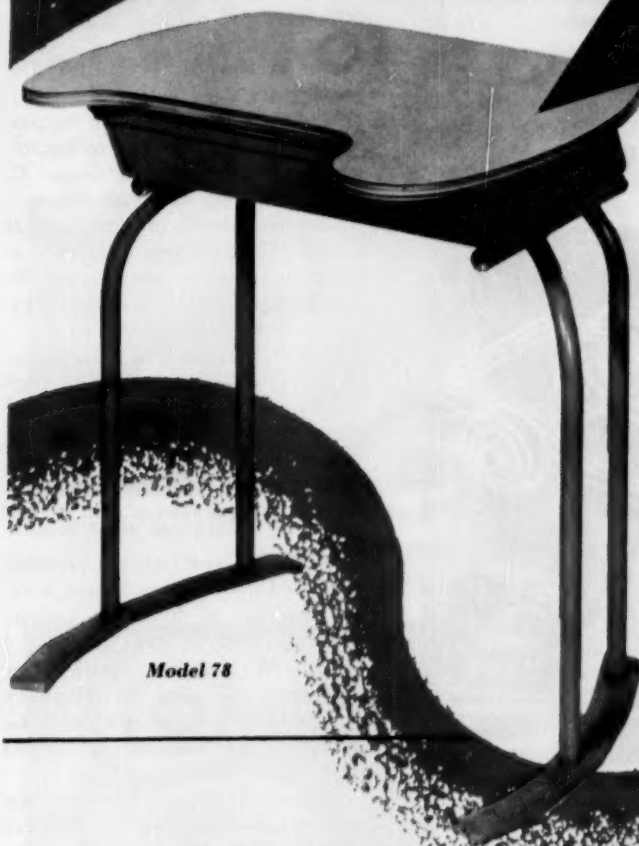
It was the feeling among the lower echelons of the military and in the U.S. Office of Education, reports state, that integration should not be pushed in the post schools until the Supreme Court had determined how and when schools should be integrated.

General

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Soliform Table Desk



Model 78

Model 208 chair

completes the
Soliform set



Check these school-tested features:

The Soliform table desk now joins the famous Bargin-designed Staput-Movable desk in General's quality line of school furniture. Like the Staput-Movable, the new Soliform is functional, beautiful, and built for years of hard service. The Soliform and the Bargin-designed Academy chair provide the *only* table and chair combination that scientifically controls posture. Moves easily and quietly for limitless classroom formations, stands firmly on Neoprene shoes when in use.

Model 78 is the Soliform table with lifting-lid book box; Model 76 is the Soliform without book box. (Open front book box available for Model 76.)

Natural wood, marble-like plastic or Fibreglass tops available.

Write for Soliform literature.



- Palette-shaped top for proper writing posture



- Easily movable...yet stands firm when in use



- Saves valuable floor space for other activities



- Maximum work area within minimum space

General



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ABOUT PEOPLE

APPOINTED . . .

Maurice E. Stapley, assistant dean of the school of education, Indiana University, Bloomington, to director of projects for the National School Boards Association with headquarters at Indiana University. He has been granted a one year's leave of absence to serve in this post.

Edwin Keiser, teacher in the high school at Rising City, Neb., to superin-

tendency there, succeeding **D. A. Burkey**.

James W. Martin, principal of the high school at Arlington, Tex., to superintendency there.

Alan W. Kingston, supervising principal at Wabeno, Wis., to supervisor of Indian education for Wisconsin, succeeding **Bert Johnson**.

Carroll Hanson, executive secretary of the Pasadena Education Association, Pasadena, Calif., to director of publication services, U.S. Office of Education, Washington, D.C.

Lawrence G. McGinn, deputy superintendent at Lynn, Mass., since 1945, to superintendency there, succeeding **Ernest Stephens**, who has retired.

C. J. Gludt, superintendent at Killdeer, N.D., to superintendency at Caselton, N.D.

Eugene L. Freel, acting president of State Teachers College, North Adams, Mass., to presidency there, succeeding **Grover C. Bowman**, who retired December 31.

W. Robert Gaines, assistant superintendent at Charleston, S.C., to superintendency there, succeeding **George C. Rogers**, who will retire July 1.

John W. Harold, superintendent at Carroll, Iowa, to superintendency at Cedar Falls, Iowa, July 1. **Paul W. Forney**, superintendent at Sibley, Iowa, will succeed Mr. Harold at Carroll.

DeWitt T. Hunt, head of the school of industrial arts education and engineering shopwork, Oklahoma A & M College, Stillwater, Okla., to specialist for industrial arts, U.S. Office of Education, Washington, D.C., during a one-year leave of absence from the college.

Melvin W. Hyde, assistant president of Drake University, Des Moines, Iowa, to presidency of Evansville College, Evansville, Ind.

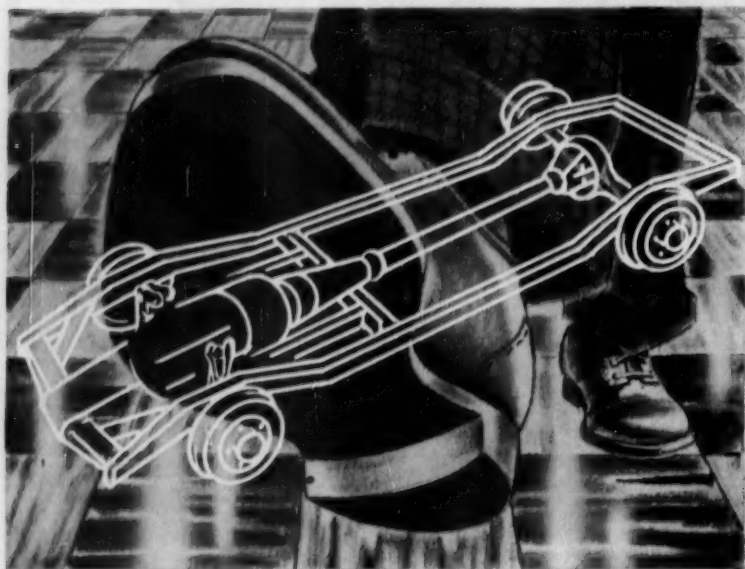
Justin W. Swenson, superintendent at Pipestone, Minn., to superintendency at Moorhead, Minn., succeeding **S. G. Reinertsen**, who is retiring at the end of the school year.

Raymond D. Nelson, principal in the high school at Lake Crystal, Minn., to superintendency there, succeeding **J. C. Rutherford**, who will become superintendent for Hermantown Independent School District near Duluth, Minn.

Donovan R. Armstrong, state supervisor of distributive education for Louisiana since 1940, to program specialist for distributive education, U. S. Office of Education, Washington, D.C.

George L. Greenawalt, former superintendent at Jackson, Mich., to director of planning and programming of technical training and teacher education in the United States for educators from Africa and the Near East, U.S. Office of Education, Washington, D.C. For the last two years Mr. Greenawalt has served on an educational mission in Iran under the Foreign Operations Administration.

C. O. Chandler, superintendent at Orange, Tex., since 1947, to superintendency at Victoria, Tex., succeeding **Truett A. Roach**, now superintendent at Andrews, Tex. **Frank Hubert**, direc-



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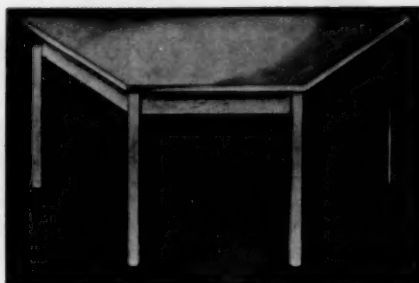
Your floors will give sure and effective braking action with each step when they're finished with VES-COTE—because VES-COTE contains the proven anti-slip agent, DuPont's "Ludox" colloidal silica.

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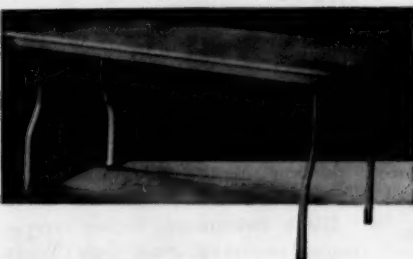
Trapezoidal Multi-Mode Table, No. 2330



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National Folding Table

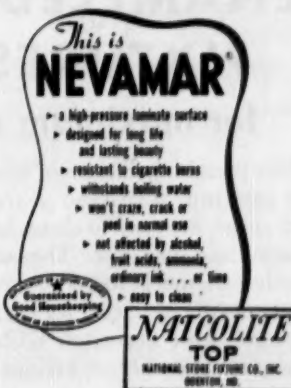
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Here is a complete line of multi-functional school equipment, designed to meet the specifications of modern teaching techniques. This furniture is completely versatile—easily arranged and rearranged to allow for an infinite variety of uses. Every desk and table in the National line has a Natcolite school top, surfaced with Nevamar plastic laminates in wood-grain patterns, specially developed and tested for uniform, low light reflectance and banded with matching Wynene plastic edging. The Natcolite top withstands years of punishment and eliminates maintenance problems, because it never needs refinishing or resurfacing. National School Furniture is highly efficient and modest in cost—adaptable to any school budget.



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ODENTON, MARYLAND

NEWS

tor of teacher certification and professional standards, Texas Education Agency, will become superintendent at Orange. Dr. Hubert served as high school principal at Orange several years ago. **Herbert LaGrone**, former principal of the University Junior High in Austin, succeeds Dr. Hubert.

RESIGNED . . .

O. W. Snarr, president of State Teachers College, Mankato, Minn., since 1941.

A. R. Ehrnst, superintendent at Foley, Minn., for the last 15 years.

Dennis H. Pope, superintendent at Renick, Mo.

B. W. Lodge, superintendent at Dodson, Mont., for the last four years.

Virginia Konegni, superintendent for Dakota County, Dakota City, Neb.

Glenn Corum, superintendent at Wyomere, Neb., effective July 1.

Thomas J. McGlynn, superintendent at De Pere, Wis., for the last 29 years, effective July 1.

Francis B. Haas, superintendent of public instruction for Pennsylvania. Dr. Haas began his career in education as a teacher in Philadelphia.

In 1920 he was named assistant director of the state department's teachers bureau, then director of the administration bureau, and later deputy superintendent of public instruction in the state department of public instruction. From 1927 to 1939 he served as president of State Teachers College, Bloomsburg, Pa. From 1939 to 1954, Dr. Haas was an editorial consultant for *The Nation's Schools*. **Ralph C. Swan**, deputy superintendent of public instruction for the state of Pennsylvania, will be acting superintendent of public instruction until a permanent superintendent is named.

Charles W. Wiggins, superintendent for Sonoma County, Santa Rosa, Calif.

Guy M. Clark, supervising principal of South Union Township schools, Uniontown, Pa., for the last 25 years.

Allen E. Bacon, superintendent at Wilkes-Barre, Pa., since 1934.

K. O. Esping, superintendent at Council Grove, Kan., since 1948.

Otis C. Hatton, superintendent at Akron, Ohio, since 1942, effective in July. Mr. Hatton began teaching in a rural school in Ohio in 1905. He then became principal and later superintendent at Covington, Ohio. He joined the Akron high school faculty in 1917.

DIED . . .

Abram Metz Kulp, superintendent for Montgomery County, Norristown, Pa., for the last 30 years.

J. Harvey Roberts, superintendent for Gloucester County, Woodbury, N.J.

E. S. Hatch, former superintendent at St. Louis Park, Minn.

Glenn Drummond, former superintendent for Auglaize County, Wapakoneta, Ohio.

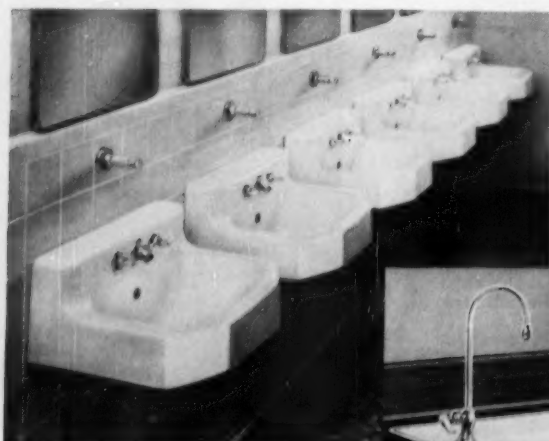
James Harvey Dockum, superintendent at McFadden, Wyo., since 1933.

Ralph Lutz, supervising principal at Versailles, Pa.

Lester R. Brewster, superintendent at Portis, Kan.



Francis B. Haas



HAMPTON lavatories, K-2701-A. Sizes 19 x 17, 22 x 19".



TECH sink, K-5990-A. Size 24 x 20".

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The new Tech sink for classrooms serves purposes ordinarily

requiring two fixtures. A hygienic bubbler for drinking reduces the need for pupils to leave the room. The faucet with gooseneck spout, simplifies the filling of bowls, bottles, vases and other vessels. A 3-inch ledge affords shelf space on three sides.

Hampton lavatories for washrooms are low-cost, have handy shelves, roomy basins, convenient mixer fittings. Send for catalog.

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Printed publications of interest to school administrators are listed as received.

ADMINISTRATION

Report of the Fourth Regional Work Conference on Improving Preparation Programs for Educational Administrators. Dec. 9 to 14, 1954, Southern States Cooperative Program in Educational Administration.

Foundations in Educational Administration. A report of an experiment in preservice preparation of school admin-

istrators. By Kenneth E. McIntyre. Southwestern Cooperative Program in Educational Administration, Austin, Tex. Pp. 75.

What Faces Ohio's Public Schools? A brief digest of the report of the Ohio School Survey Committee. The statewide committee of laymen and school administrators attempted a thorough appraisal of Ohio schools. The

report covers areas of instruction, personnel and teacher education, state educational organization, local district organization, housing, transportation and finance. Good features and weaknesses are described; a comprehensive list of recommendations for improving the schools follows. Ohio Survey Committee, Room 6, House of Representatives, Columbus. Pp. 72.

How Do We Pay for Our Schools?

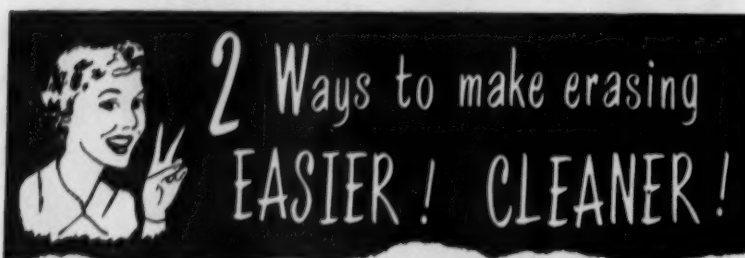
A guide to understanding public school finance. Working Guide No. 10. National Citizens Commission for the Public Schools, 2 West 45th St., New York 36. Pp. 76.

The Role of the Curriculum Director in the Administration of American Public School Systems. By Dwight L. Kirk. This book defines the part the curriculum director plays in the school system. The type of person best suited to the job, as well as desirable training, is described. The nature of the rôle that he should perform in the school, his duties to the school, and his responsibilities to the community are also set forth. Sponsored by the Southwestern Cooperative Program in Educational Administration, University of Texas, Austin 12. Pp. 48.

AUDIO-VISUAL INSTRUCTION

Educators Guide to Free Tapes, Scripts and Transcriptions. First edition, 1955. Compiled and edited by Walter A. Wittich, director, bureau of audio-visual instruction, University of Wisconsin, and Gertie L. Hanson, formerly director, radio workshop, Wisconsin State College. Published by Educators Progress Service, Randolph, Wis. Pp. 144. \$4.75.

The Audio-Visual Equipment Directory. Edited by Edward F. Arendt and Aline L. Legg. A guide to current models of audio-visual equipment, including complete specifications, prices and descriptions for 16mm motion picture equipment, filmstrip and slide projectors, opaque projectors, overhead projectors, special purpose projectors, automatic continuous still projectors, sound slidefilm projectors, record and transcription players, disk recorders, magnetic tape recorders and playbacks, repetitive tape equipment, projection screens, projection tables, stands and pointers. Special sections list sources of film library equipment and services



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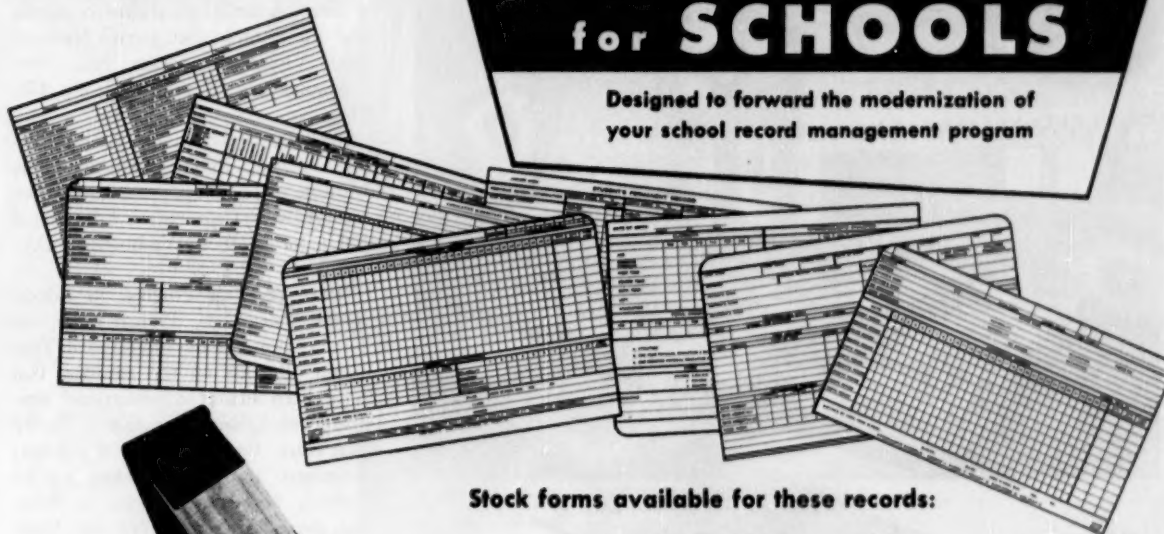
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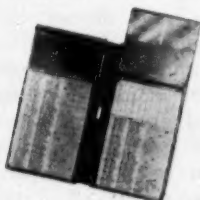
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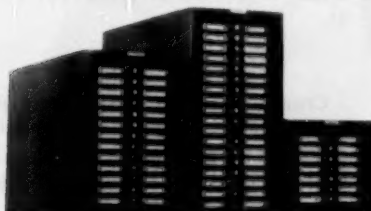
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and miscellaneous accessory equipment. A complete list of manufacturers' names and addresses is also given. National Audio-Visual Association, Inc., 2540 Eastwood Ave., Evanston, Ill. Pp. 184. \$4.

Wall Pictures. An old teaching device reshaped. By Hugo Mueller of the Institute of Languages and Linguistics, Georgetown University. Educational Laboratories, Inc., Washington, D.C. Pp. 60.

Two Years of Progress in Educational Television. Prepared by the Joint Committee on Educational Television. Reports on the advances that have been made in educational television throughout the nation in the last two years. Financial support, publicity programs, and local activities are described. New developments in different areas of the country are listed. Joint Committee on Educational Television, 1785 Massachusetts Ave., N.W., Washington 6, D.C. Pp. 55.

COMMUNITY RELATIONS

A Tale of Two Teachers. By Mark Nichols, state director of vocational education in Utah and president of the American Vocational Association. Relates the means a good teacher may use, and a poor one will not, to organize his program and inform other members of his school system about it. The two teachers reveal their methods for acquainting the community with their programs, interesting youth and adults of the community in participating in it, and making its importance known to civic and state authorities. American Vocational Association, 1010 Vermont Ave., N.W., Washington 5, D.C. Pp. 14.

Improving Public Education Through Citizen Participation. By Maurice J. Thomas, professor of education, University of Pittsburgh. Workbook manual prepared for the use of lay committees in evaluating their schools. University of Pittsburgh Press. Pp. 146. \$3.

CURRICULUM

Current Topics in School and College Safety. 1954 transactions, Vol. 26. National Safety Council, 425 North Michigan Ave., Chicago. Pp. 84. 46 cents.

Educating Children in Grades Seven and Eight. By Gertrude M. Lewis. (Continued on Page 160)



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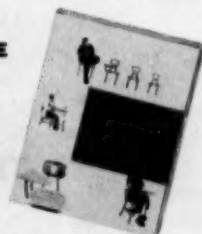
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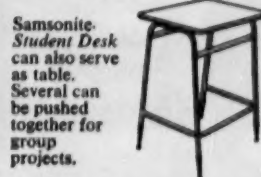
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THE BOOKSHELF

(Continued From Page 156)

Bulletin 1954, No. 10, U.S. Office of Education. U.S. Government Printing Office, Washington 25, D.C. Pp. 99. 35 cents.

Sources of Free and Inexpensive Educational Materials. Prepared by the reference library, Field Enterprises, Inc. Materials are listed from a wide number of sources; prices are quoted for those materials not free upon request. The listing is divided into a directory

of sources and a subject index. Instructions are also given for ordering materials. Field Enterprises, Inc., Merchandise Mart Plaza, Chicago 54. Pp. 192. \$5.

"Touchstones" of Literature. Compiled by the committee on the teaching of English of the Metropolitan School Study Council. Describes in general terms 15 "classics" and suggests teaching aids to make these books meaningful, even to poor readers. The various

works were chosen to represent different qualities of human character. Metropolitan School Study Council, 525 West 120th St., New York 27. Pp. 61. \$1.

Social Understanding Through Literature. A bibliography for secondary schools. By G. Robert Carlsen, college of education, University of Texas, and Richard S. Alm, department of education, University of Hawaii. Bulletin No. 28, National Council for the Social Studies, 1201 16th St., N.W., Washington 6, D.C. Pp. 111. \$1.25.

Foundations of Secondary Education. By Carl G. F. Franzén, professor of secondary education, Indiana University. Harper & Brothers, 49 East 33d St., New York 16. Pp. 492. \$4.50.

Curriculum Designs in Physical Education. By Charles C. Cowell and Helen W. Hazelton, both of the department of physical education, Purdue University. Prentice-Hall, Inc., 70 Fifth Ave., New York 11. Pp. 403. \$5.50.

Approaches to an Understanding of World Affairs. Edited by Howard R. Anderson. Yearbook of the National Council for the Social Studies, 1201 16th St., N.W., Washington 6, D.C. Pp. 478. \$3.50.

FINANCE

Federal Funds for Education, 1952-53 and 1953-54. By Clayton D. Hutchins, Albert R. Munse, and Edna D. Booher, U.S. Office of Education. Bulletin 1954, No. 14. U.S. Government Printing Office, Washington 25, D.C. Pp. 130. 45 cents.

HIGHER EDUCATION

Founding Public Junior Colleges. Local initiative in six communities. By Elbert K. Fretwell Jr. Bureau of Publications, Teachers College, Columbia University, New York 27. Pp. 148. \$3.75.

INSTRUCTION

Methods in Reading. By Edward William Dolch, professor of education, University of Illinois. Reviews the methods used for teaching reading and for discovering how well a child can read once he has learned. The Garrard Press, 119-23 West Park Ave., Champaign, Ill. Pp. 377. \$3.50.

Teaching Every Child to Read. By Kathleen B. Hester, professor of education, Michigan State Normal College.

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Five Steps to Reading Success in Science, Social Studies and Mathematics. By the committee on the teaching of English, Metropolitan School Study Council. Systematic approach to the teaching of various kinds of reading needed for different subject areas. Examples drawn from the three specified areas are followed by practical teaching suggestions. Metropolitan School Study Council, 252 West 120th St., New York 27. Pp. 39. 65 cents.



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MENTAL HEALTH

Mental Health in Modern Education. Fifty-fourth yearbook of the National Society for the Study of Education, Part II. Edited by Nelson B. Henry. Distributed by the University of Chicago Press, Chicago. Pp. 397.

PUPIL PERSONNEL

Student Marriages in New Mexico Secondary Schools, 1952-53. By Wilson H. Ivins. University of New Mexico Press, Albuquerque. Pp. 84. \$1.

Guidance in a Rural-Industrial Community. By Amber Arthun Warburton, executive secretary, Alliance for Guidance of Rural Youth. Reports on the progress that Harlan County, Kentucky, has made in learning the needs of school children and steps that have been taken to improve the school situation for them. The guidance program which has been instituted in the county is outlined as it touches on the youth guidance institute, juvenile delinquency, health, occupational planning, and the education of teachers for guidance responsibilities. Appraisals of the schools as they were and as they are now are presented through remarks by persons in the community about their past experience and present day students. Alliance for Guidance of Rural Youth with the cooperation of the Department of Rural Education, N.E.A. 1201 16th St., N.W., Washington 6, D.C. Pp. 249.

The Peer Status of Sixth and Seventh Grade Children. By Frances Laughlin. Bureau of Publications, Teachers College, Columbia University, New York 27. Pp. 85. \$2.75.

How, When and Where to Provide Occupational Information. By Glen L. Weaver, state supervisor of the occupational and guidance service, division of vocational education, Oregon State Department of Education. Science Research Associates, Inc., 57 West Grand Ave., Chicago 10. Pp. 47. \$1.

Opportunities Index. Midwest edition. A guide to educational opportunities in business, trade, technical and professional schools. By William B. Anderson, high school counselor, Eureka, Kan. Published by William B. Anderson, 416 South State St., Eureka, Kan. Pp. 93. \$2.

SPECIAL EDUCATION

Education and Health of the Partially Seeing Child. By Winifred Hatha-

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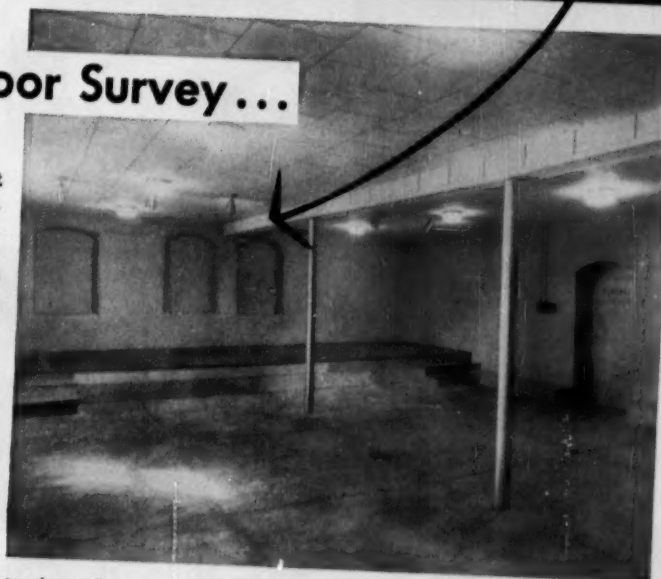
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way. Published for the National Society for the Prevention of Blindness, Inc., by Columbia University Press, 2960 Broadway, New York 27. Pp. 227. \$3.75.

Evaluation and Education of the Cerebral Palsied Child. New Jersey study. By Thomas W. Hopkins, principal, A. Harry Moore School, Jersey City, N.J.; Harry V. Bice, clinical psychologist, New Jersey State Crippled Children Commission, and Kathryn C.

Colton, guidance clinic director, A. Harry Moore School. International Council for Exceptional Children, 1201 16th St., N.W., Washington 6, D.C. Pp. 114. \$1.60.

The Education of Migrant Children. By Shirley E. Greene, director of the migrant research project board, National Council on Agricultural Life and Labor. Reviews the problems of educating migrant children in four communities which represent four different

crop areas. Work conditions as they affect the enrollment of children in schools during the regular term, the children's scholastic achievement, and their integration into existing schools are described and substantiated with statistical information for the areas under study. Suggestions are made to local school authorities, departments of public instruction, principals and teachers, and local communities and groups as to what measures they may take to improve the conditions of education for migrant children. Department of Rural Education, National Education Association, 1201 16th St., N.W., Washington 6, D.C. Pp. 179. \$2.50.

TEACHER EDUCATION

American Public Education. An introduction. Second edition. By Calvin Grieder, professor of education, University of Colorado, and Stephen Romine, associate professor of education, University of Colorado. Reviews the development and present achievement of public schools for students in colleges and universities who are beginning their preparation to teach and for teachers in service who have never systematically prepared themselves in this field or received their preparation many years ago. The Ronald Press Company, 15 East 26th St., New York 10. Pp. 424. \$4.75.

The Carnegie Foundation for the Advancement of Teaching. Annual report. 589 Fifth Ave., New York 17. Pp. 44.

FROM SCHOOL SYSTEMS

Annual Report, 1954. Sewanhaka Central High School, District No. 2, Floral Park, N.Y.

Operation Schools. Annual report of the superintendent, 1953-54. Detroit Board of Education.

Your Schools Today and Goals for Tomorrow. Biennial report of the superintendent of public instruction of Montana, 1954. Distributed by McKee Printing Company, Butte, Mont. Pp. 101.

OF GENERAL INTEREST

Official Report of the Visiting Educator Program, September - December 1953. School of Education, University of Wisconsin, Madison. Pp. 117.

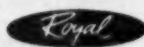
Fact Kit. Published by the Comics Magazine Association of America, Inc.,

(Continued on Page 168)



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St. John's University, Collegeville
Board of Education, Bangor
Minneapolis Armory, Minneapolis
State Teachers College, Moorhead
Cathedral High School, St. Cloud
Macalester College, St. Paul

MISSISSIPPI
U.S. Mar. Mar. Cadet Sch., Pass Christian
Pearl River Jr. College, Poplarville

MISSOURI
Brentwood High School, Brentwood
Southeast Mo. State Coll., Cape Girardeau
Wm. C. Bryant School, Kansas City
Bishop DuBourg High School, St. Louis
DeAndreis High School, St. Louis
St. Anthony High School, St. Louis
Washington University, St. Louis
Cent. State Teachers College, Warrensburg
Webster College, Webster Groves

MONTANA
Senior High School, Billings
School of Mines, Butte
High School, Great Falls
School of Mines, Helena
Corvallis High School, Corvallis

OHIO
Akron Public Schools, Akron
Grandview High School, Columbus
Euclid St. High School, Cleveland
Hamilton Public Schools, Hamilton
Miami University, Oxford

OKLAHOMA
U. S. Army, Fort Sill, Lawton
University of Oklahoma, Norman
Wagoner Public Schools, Wagoner

OREGON
High School, Baker
State College, Corvallis
High School, Nyssa
Schools, Parkrose
& Lant Schools, Portland

PENNSYLVANIA
Spring Summerhill School, Conneautville
E. Stroudsburg High, E. Stroudsburg
State Teachers College, Mansfield
Langley High School, Pittsburgh

SOUTH CAROLINA
Eg. Claire High School, Columbia
Brentwood High School, Greenwood
Y.M.C.A., Greenwood
Y.M.C.A., Rock Hill

SOUTH DAKOTA
South Dakota State College, Brookings
City Auditorium, Chamberlain

TENNESSEE
Bendridge High School, Bendridge
Bearden High School, Knoxville
Central High School, Murfreesboro
David Lipscomb College, Nashville
Franklin Co. High School, Winchester

TEXAS
Amarillo Jr. College, Amarillo
San Houston Jr. High School, Amarillo
Burkburnett High School, Burkburnett
W. E. Ray High School, Corpus Christi
Rice Institute, Houston
Kilgore Public Schools, Kilgore
Loveland High School, Loveland

UTAH
High School, Murray
High School, Ogden
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High School, St. Albans
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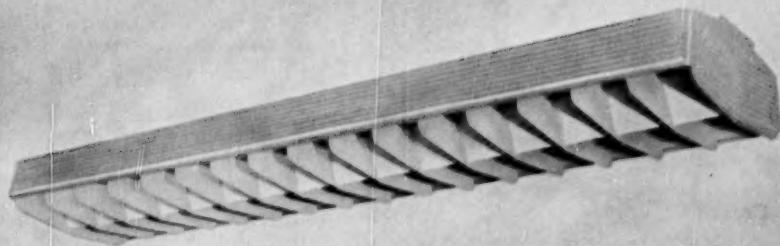
The average student spends at least 900 hours in school, annually. Every second of this crowded schedule his eyes are constantly active... going from textbook, to blackboard, to teacher, to writing pad—thousands of times. In fact, most of his school life *is* spent under artificial illumination. Illumination that must be comfortable, glare-free and built to last for years. That's why many school officials and architects specify Westinghouse lighting fixtures in classrooms, manual training shops, gymnasiums—in fact all through the school.

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Let your architect and electrical contractor know your preference for Westinghouse lighting fixtures. More information? Make a point to see your nearby Westinghouse distributor, or write Westinghouse Electric Corporation, Lighting Div., Edgewater Park, Cleveland, O.

* As published by Nation's Schools magazine. J-04361

YOU CAN BE **SURE...IF IT'S** Westinghouse



New LC luminaires, with wrap-around plastic side panels, create a pleasant environment for learning.

THE BOOKSHELF

(Continued From Page 164)
41 East 42d St., New York 17. Seven pamphlets.

Sportsmanlike Driving. Third edition. Published by the American Automobile Association, Washington, D.C. Printed by Kingsport Press, Inc., Kingsport, Tenn. Pp. 460.

Modern Philosophies and Education. Fifty-fourth yearbook of the National Society for the Study of Education, Part I. Edited by Nelson B. Henry.

Distributed by the University of Chicago Press, Chicago. Pp. 369.

About UNESCO. A small illustrated pamphlet which describes in simple terms the major activities of UNESCO in the fields of education, technical assistance, and cultural exchange. Prepared by the Center for Mass Communication, Columbia University Press, 2960 Broadway, New York 27. 15 cents.

Developing a Concept of the Dimensions of Man. By Kenneth Herrold and

David M. Hertz. Published for the Cooperative Program in Educational Administration, Middle Atlantic Region, by the Bureau of Publications, Teachers College, Columbia University, New York 27. Pp. 46.

A Policy for Skilled Manpower. Prepared by the National Manpower Council. Columbia University Press, 2960 Broadway, New York 27. Pp. 299. \$4.50.

COMING EVENTS

MARCH

31-April 2. Southeastern Association of School Business Officials, Birmingham, Ala.

APRIL

2-6. Regional convention, American Association of School Administrators, Cleveland.

3. National School Public Relations Association, regional conference, Cleveland.

4. American Educational Research Association, regional meeting, Cleveland.

4. Educational Press Association, Cleveland.

11-15. Association for Childhood Education International, study conference, Kansas City, Mo.

11-16. National Art Education Association, biennial meeting, Cleveland.

18-21. National Education Association, third regional instructional conference, Denver.

18-22. Department of Audio-Visual Instruction, N.E.A., annual convention, Los Angeles.

20-22. Pennsylvania Schoolmen's Week, University of Pennsylvania, Philadelphia.

MAY

1-3. Ninth annual meeting of Presidents of State Associations of School Administrators, Louisville, Ky.

9. National Citizens Commission for the Public Schools, annual dinner, New York.

23-25. National Congress of Parents and Teachers, annual convention, Chicago.

JULY

3-8. National Education Association, 93d annual convention, Chicago.

4-7. National School Public Relations Association, annual meeting, Chicago.

11-22. Department of Classroom Teachers, N.E.A. national conference, West Lafayette, Ind.

OCTOBER

9-12. County and Rural Area Superintendents, annual conference, San Diego, Calif.

16-20. Association of School Business Officials, annual convention, Chicago.

17-21. National Safety Council, 43d congress and exposition, Chicago.



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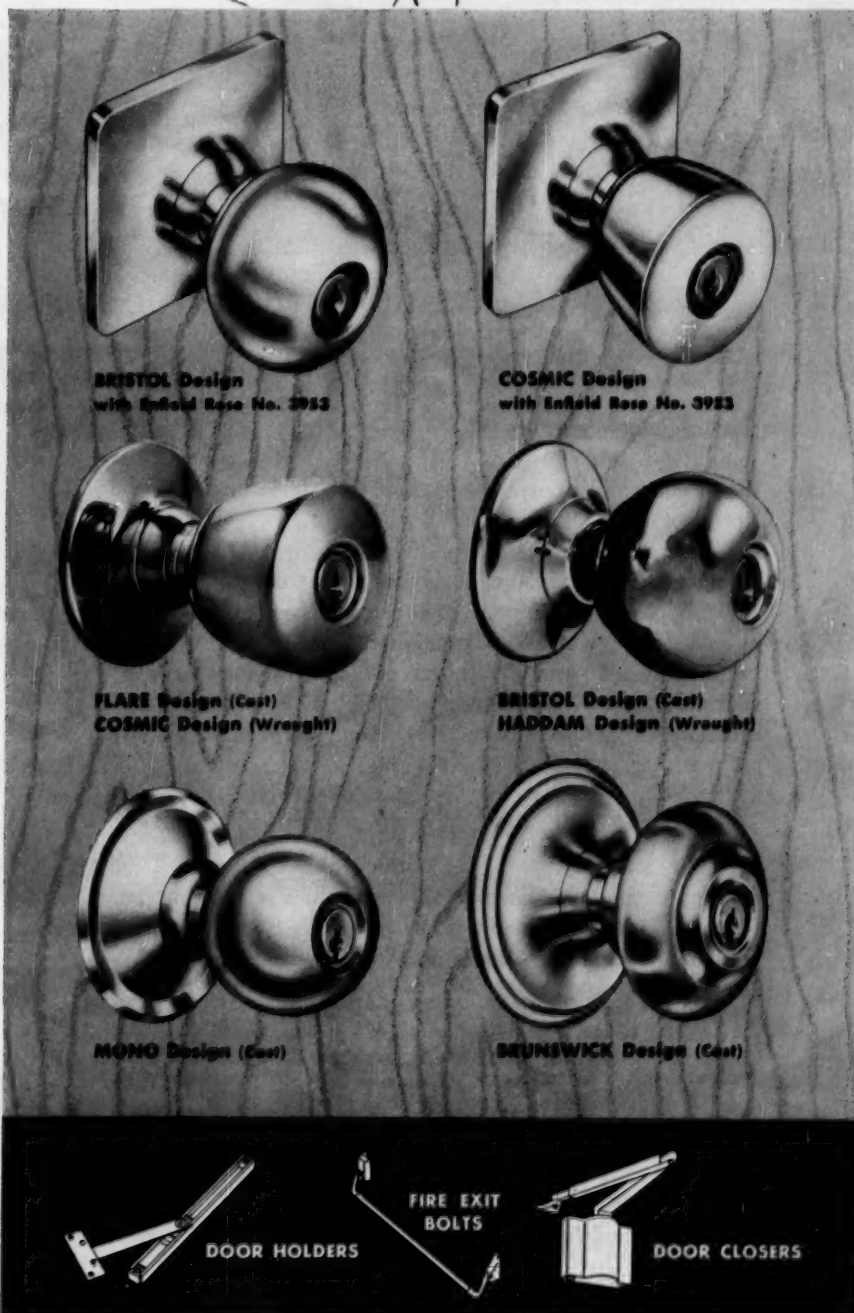
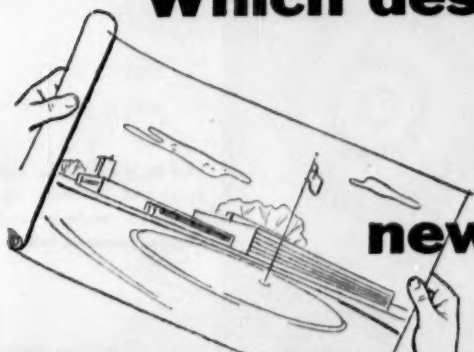
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Architects: Bachman and Bertram, Hammond, Indiana.



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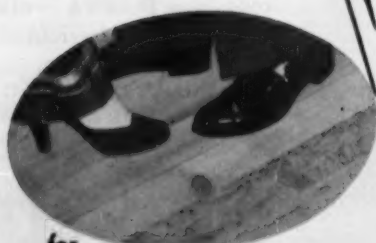
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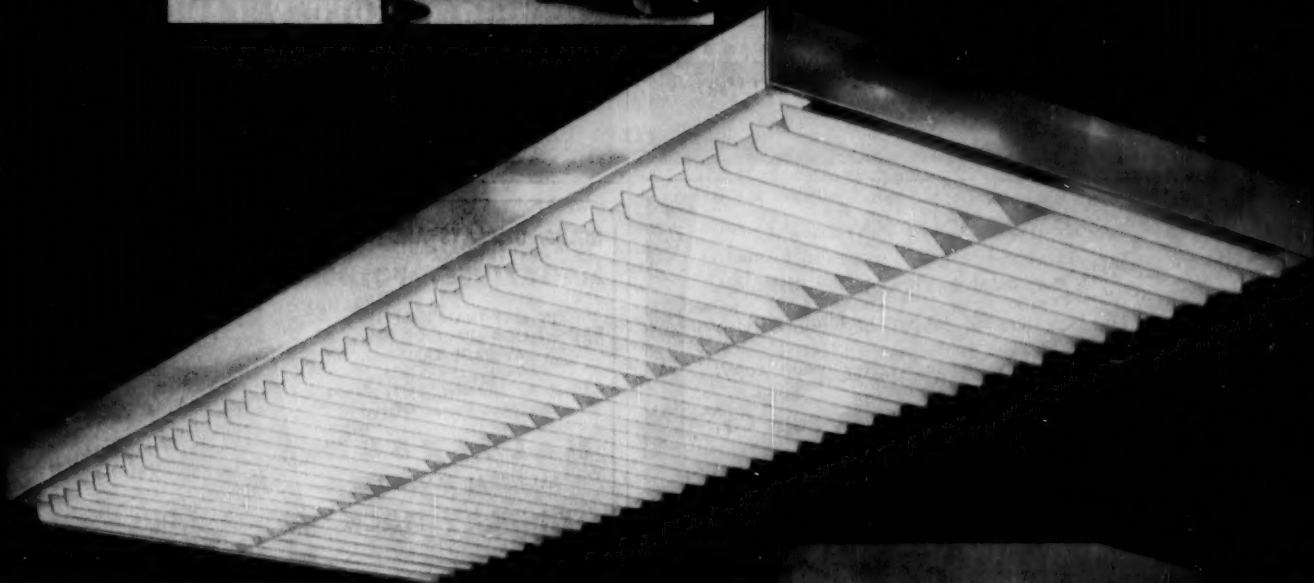
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As basic to modern education as a standard dictionary or encyclopedia is contemporary school lighting. Today's teaching techniques depend heavily on learning by seeing and demands on young eyes are very great. School lighting is an intricate science involving ideal light distribution, proper shielding, brightness and glare factors plus the mechanics of delivering quality lighting where it is needed.

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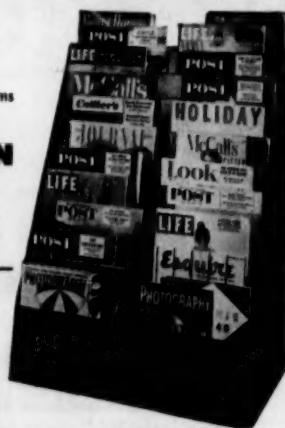
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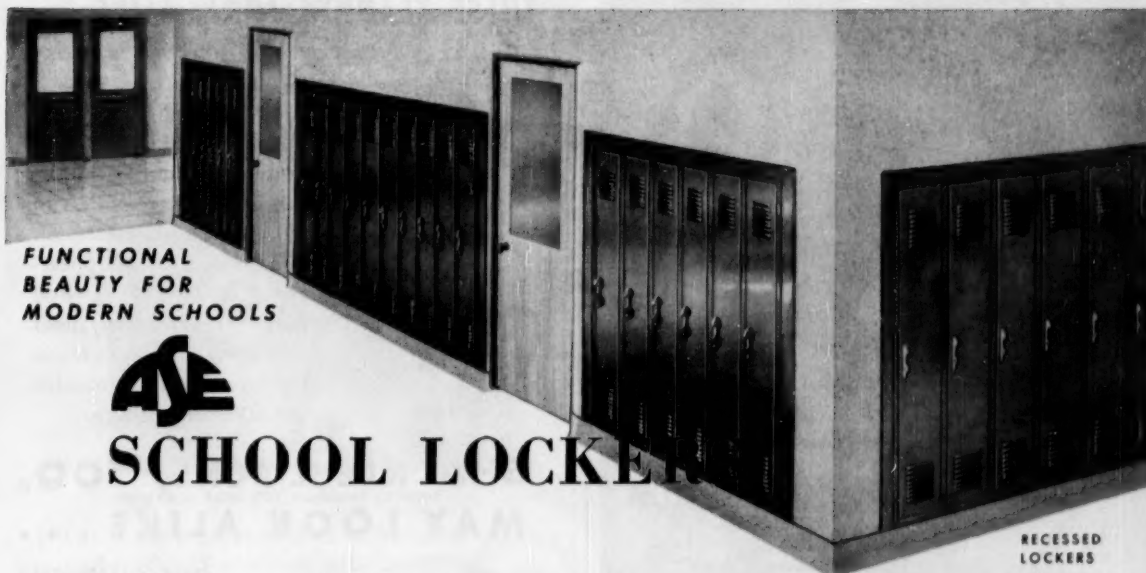
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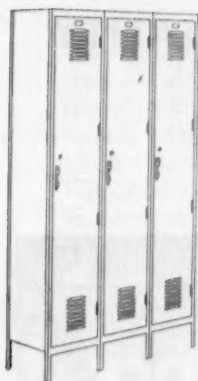
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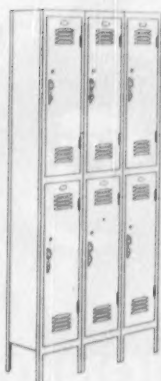
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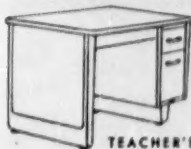
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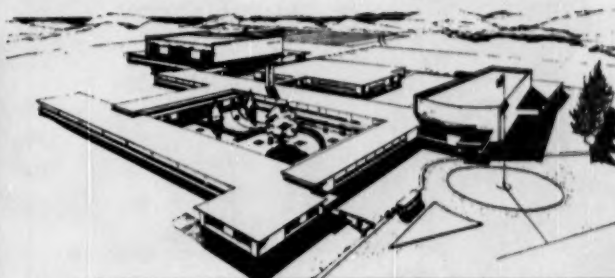
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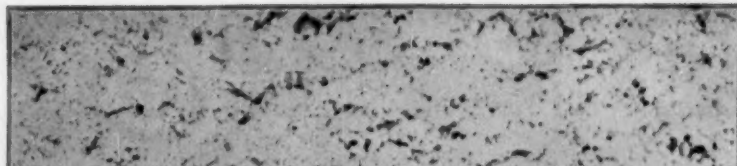
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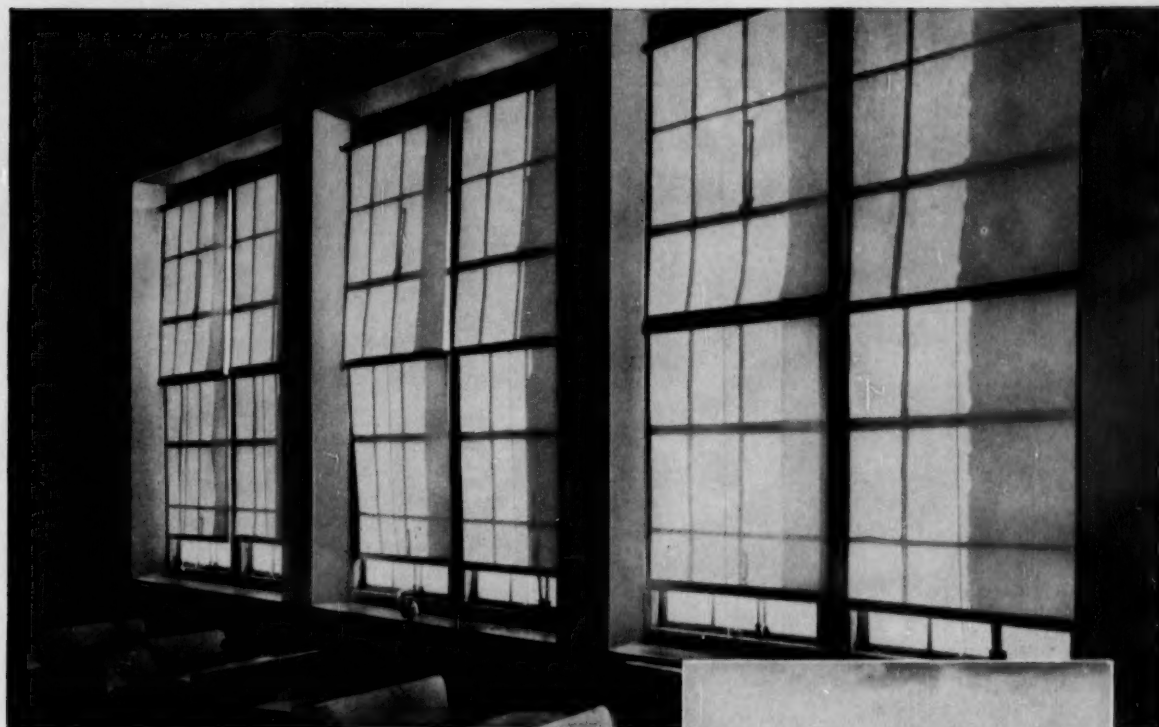
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E. I. du Pont de Nemours & Co. (Inc.), Dept. NS-54
Fabrics Div., Nemours Bldg., N-11508, Wilmington 98, Del.

Please send me the free booklet telling how to measure the DURABILITY of window shade cloth.

Name _____ Title _____

Organization _____

Address _____

City _____ State _____

a Quiz that may save your life

Q. What is cancer?

A. An uncontrolled growth of cells. If permitted to spread through the body, it inevitably leads to death.

Q. Can cancer be cured?

A. Many types can be cured, but only if they are discovered and treated early.

Q. How can cancer be discovered in time?

A. By your doctor who has available many diagnostic tests.

Q. What is the American Cancer Society?

A. The only national voluntary agency which fights cancer by research, education and service to cancer's victims.

Q. What has it accomplished?

A. It helped save an American from dying of cancer on an average of every seven minutes last year.

Q. Does that mean it has solved the cancer problem?

A. Unfortunately, no. Despite the advances made, more than 235,000 Americans will die of cancer this year.

Q. Can I help to prevent this tragedy?

A. Yes. By having regular health examinations yourself. And by contributing to the American Cancer Society.

Q. What will my contribution be used for?

A. For research that may some day save your life, for education and for helping cancer's victims.

Strike back at cancer...man's cruelest enemy...Give

to American Cancer Society

**BRIGHT
AS
DAY!**

SVE



School Master 500

Dual-Purpose Projector
Single Frame Filmstrips • 2x2 Slides

Teachers and administrators everywhere know the brilliant performance, versatility and rugged construction of the School Master 500. 500-watt lamp, super-blower cooling, trunion-type elevating. Uni-way threading, finger-tip framing. Aperture plates for added protection to filmstrips. Switch from filmstrips to slides in 7 seconds! New rewind take-up* accessory automatically returns filmstrips to original container, ready for next showing. Complete with carrying case and heavy duty horizontal transverse slide carrier, \$98.50. Projector only, \$84.50. School Master 300, only, with all major features—300-watt lamp, \$64.50. (*Rewind take-up for either model \$5.95 additional.)

SVE Instructor TRI-PURPOSE PROJECTORS

- Single Frame Filmstrips
- Double Frame Filmstrips
- 2 x 2 Slides

Simple Operation • Cool Performance

(Model number indicates lamp wattage)

Instructor 300.....	\$ 89.50
Instructor 500.....	109.50
Instructor 750.....	139.50
Instructor 1000.....	
AC only.....	189.50
AC-DC.....	219.50

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Hundreds of Filmstrips and Slide Sets listed and described. Indexed for easy selection. Send for your copy today.
"Teaching with a Filmstrip"—an interesting and informative booklet.

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(A Business Corporation)

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Please send me, without obligation, the SVE literature checked below:

- ☐ Educational ☐ Protestant Religious subjects
☐ Catholic Religious subjects
☐ Booklet, "Teaching with a Filmstrip"

Name.....

School (or Church).....

Address.....

City..... Zone..... State.....

CREDITS: Scotts Valley School, Yoncalla, Oregon. Architect: Norris M. Gaddis, A.I.A.

"...artificial lighting not necessary
even on darkest days"



with **WASCOLITE SKYDOMES**

WASCOLITE SKYDOMES were installed in this brand-new school to provide uniform overhead daylighting throughout the building. As a result, the kitchen, classrooms and corridors are naturally bright, cheerful, and much more functional.

This new technique of daylighting has proved extremely economical in school construction throughout the nation. With WASCOLITE SKYDOMES, architects can design compact, efficient schools . . . at low building costs. Lighting bills are lower, too.

Look into WASCOLITE SKYDOMES, for overhead daylighting, and WASCOLITE VENTDOMES, for daylighting plus ventilation. Write today for free booklet Daylighting Your Schools.

- TOP SPECIALISTS IN DAYLIGHTING AND FLASHING PRODUCTS

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Pat. Nos. 2610593, 2693156 and pats. pend.



What's New FOR SCHOOLS

APRIL 1955

Edited by BESSIE COVERT

TO HELP YOU get more information quickly on the new products described in this section, we have provided the postage paid card opposite page 224. Just circle the key numbers on the card which correspond with the numbers at the close of each descriptive item in which you are interested. The NATION'S SCHOOLS will send your request to the manufacturers. If you wish other product information, just write us and we shall make every effort to supply it.

"Trim Line" Furniture Features Modern Design



A new line of tubular steel school furniture in modern design has been introduced by Heywood-Wakefield. Known as the "Trim Line," all types of classroom desks, chairs, tables, tablet arm chairs and auxiliary pieces are included. Chrome frames, multi-colored book boxes and solid wood seats and tops in natural finish are some of the high points of the new line.

Illustrated is a desk and chair unit typical of the new line. The clean, modern lines of the design make for attractive classroom appearance. Units can be moved to suit special needs and harmonize with other pieces in the line. They are easy to clean and maintain and are ruggedly constructed for hard usage. The new "Trim Line" is being offered in addition to the standard line of tapered steel school furniture manufactured by the company. The Heywood-Wakefield Company, Menominee, Mich. and Gardner, Mass.

For more details circle #189 on mailing card.

Cold Water Source for Air Conditioning Systems

Factory-assembled packaged water chillers are now available as a cold water source for all air conditioning systems. The new line has circuits completely piped, wired and tested and the packages range in size from 2 to 75 h.p. for use in buildings of all sizes. The small sizes have a hermetically-sealed motor and compressor assembly mounted within a rigid steel frame. Units are complete with factory-charged refrigerant circuits and require only simple piping and electrical connections for use.

The addition of packaged water chillers to the American-Standard line provides complete room and central station

equipment for all multi-room air conditioning systems. American Radiator & Standard Sanitary Corp., P.O. Box 1226, Pittsburgh 30, Pa.

For more details circle #190 on mailing card.

Tumbler Suit Is Fashionable and Functional

Students will enjoy wearing the new Pixie Tumbler Suit recently introduced. Known as Style A48-66, the Pixie has style appeal with functional design. Out-of-the-way fullness gives the suit an attractive appearance. Light-pressure elastic holds easily to the back of the waist and half-bands the leg. There is a "spill-proof" pocket, all the leg freedom of



shorts, and the neck may be worn open or closed. E. R. Moore Company, 932 W. Dakin St., Chicago 13.

For more details circle #191 on mailing card.

Minatone Acoustical Tile in Half-Inch Thickness

Minatone acoustical tile is now available in an economical one-half inch thickness. Perforations in the new thickness are in the Full Random design used on regular Minatone. The sound absorbing and fire safe tile is available in 12 by 12 and 12 by 24 inch sizes. Armstrong Cork Co., Lancaster, Pa.

For more details circle #192 on mailing card.

Communication System Has Decentralized Operation

Incorporating into a single system two-way intercommunication, paging, public address, AM-FM radio, recorded music, alarm, program and time signal trans-

mission, the new Executone School Communication System features decentralized operation. All transmissions are provided in a single conduit system, saving installation costs with no sacrifice in complete intercommunication and sound facilities. Two separate channels for sound programs and an additional one for intercom are provided in the system so that three activities may be in progress at one time.

Intercommunication from the administrator's desk to the classroom is provided without the burden of program operations, such as channeling music. The simplified, compact Administrator's Control Station provides instant two-way voice contact with every classroom and can be located on the administrator's desk. All other operations of the system are controlled at the Sound Control Rack located outside the administrator's office, for operation by an assistant. A built-in AM-FM tuner with visual tuning eye, three-speed automatic record changer and relay-controlled amplifier are provided in the Sound Control Rack. Push-button classroom selectors provide for program distribution to selected classrooms, groups or areas. Switching facilities permit local amplification of auditorium or gymnasium programs and broadcast of these programs to classrooms. Alarms and signalling are also handled through the system. Flush wall-mounted Classroom Stations for new construction or surface wall-mounted



housing for existing buildings are provided in the system which supplies every communication need. Executone, Inc., 415 Lexington Ave., New York 17.

For more details circle #193 on mailing card.

(Continued on page 184)

What's New ...

Folding Band Stand Is Easily Mobile

Extreme portability is claimed for the new Erickson Fold-A-Way Band Stand. The 12 by 4 foot stand can be folded in a matter of seconds by one man and easily wheeled to place of use or to storage. It was designed for schools and other institutions where multiple use of floor space is desirable. Conversion can be accomplished with minimum expenditure of time and labor.

Two or more units can be combined in various arrangements for groups up to symphony orchestra size. Fast-acting safety clamps ensure stability while in use. The units can be used for band or orchestra, as a small stage in classrooms, or, with a combination of several units, as a larger stage. They require small



space for storage and are ruggedly constructed with 9 ply plywood platforms 1 1/4 inch thick, mounted on 1 1/4 inch

square formed steel tubing with rubber tired wheels for easy mobility. Halde-man-Homme Mfg. Co., 2580 University Ave., St. Paul 14, Minn.

For more details circle #194 on mailing card.

Temperature Control Panel Is All Electronic

An all electronic temperature control panel which is easy to install and service has been added to Dunham's Vari Vac line of automatic temperature control equipment and systems. All moving parts are contained within a single, compact amplifier unit. No wiring connections need be broken within the panel in the installation or removal of the amplifier unit. The plug type electrical connection suffices. C. A. Dunham Co., 400 W. Madison St., Chicago 6.

For more details circle #195 on mailing card.

"Action-Arm" for Traffic Control

A new traffic control signal has been developed for school crossings which permits the school traffic patrol to work from the sidewalk. From that safe position, the pupil patrol raises the "Action-Arm" to stop traffic when pupils are crossing and lowers it for traffic movement. It is not necessary for patrols to enter the street to control traffic.

(Continued on page 186)



The Perpetual control operates without electricity, batteries or winding. The control button puts the arm into action by simple pressure. There is no maintenance and the signal is constructed for years of service. Perpetual Signal Co., 272 Palm, Fresno, Calif.

For more details circle #196 on mailing card.

Food Waste Disposer Effective as Pre-Wash Unit

Model "JH" Waste-X-It is a versatile new food waste disposer capable of heavy duty performance. It can be installed in preparation or scrap tables with economical cone adapters. An overhead spray and salvage basin make it possible to use the unit as a combination scrapping and pre-wash facility. The Salvajor Co., 118 Southwest Blvd., Kansas City 8, Mo.

For more details circle #197 on mailing card.

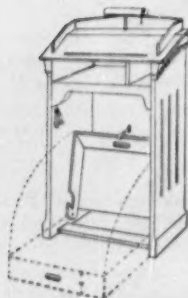


DuQuaine LECTERNS!

DuQuaine Lecterns are universally acclaimed by school and college officials, for their ultra modern design and unmatched beauty. They transcend anything ever attempted in a combination of dignity, sturdiness and practicality . . . truly the aristocrat of the Auditorium.

DuQuaine Lecterns include several models with telescopic Height Adjustable features at finger tips. Seventeen models . . . a Lectern for every purpose in every price range. Available in Mahogany, Blond Mahogany, Walnut and Grey Walnut. All hand rubbed. Also special finishes.

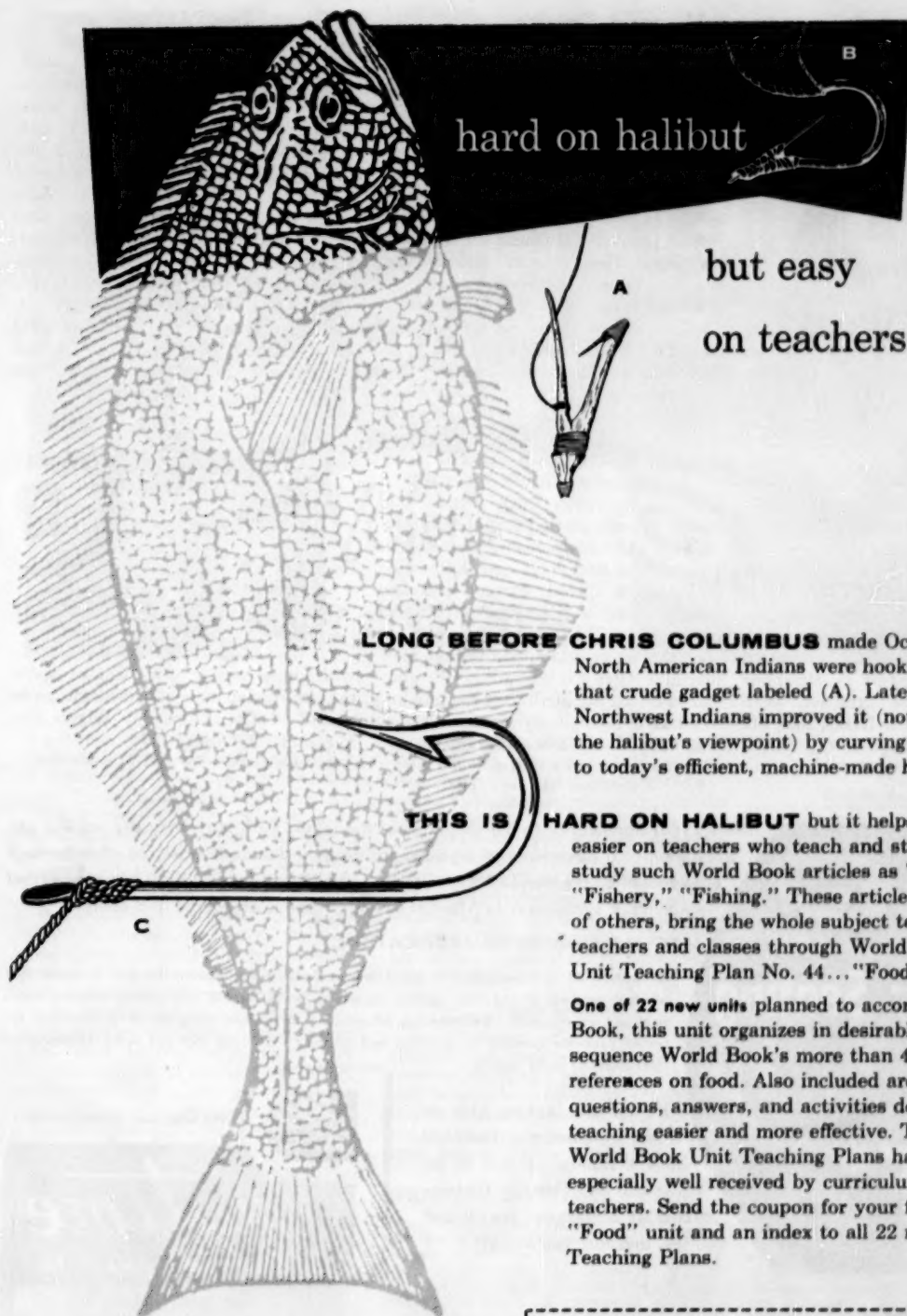
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but easy
on teachers

LONG BEFORE CHRIS COLUMBUS made October 12 famous, North American Indians were hooking halibut with that crude gadget labeled (A). Later, our Pacific Northwest Indians improved it (not, however, from the halibut's viewpoint) by curving it (B). Which led to today's efficient, machine-made halibut hook (C).

THIS IS

HARD ON HALIBUT but it helps make things easier on teachers who teach and students who study such World Book articles as "Fish," "Fishery," "Fishing." These articles, plus hundreds of others, bring the whole subject to life for teachers and classes through World Book's Unit Teaching Plan No. 44... "Food."

One of 22 new units planned to accompany World Book, this unit organizes in desirable teaching sequence World Book's more than 400 separate references on food. Also included are study questions, answers, and activities designed to make teaching easier and more effective. These new World Book Unit Teaching Plans have been especially well received by curriculum workers and teachers. Send the coupon for your free copy of the "Food" unit and an index to all 22 new Unit Teaching Plans.

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Mr. George M. Hayes, World Book
Dept. 1414, Box 3565, Chicago 54, Illinois

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School.....

Address.....

City..... Zone..... State.....

What's New ...

Folding Chair Has Safety Brackets

Heavy folding brackets are used on the new metal folding chair so designed that it cannot pinch the fingers when being



opened or closed. The chair combines comfort, durability and long life in an easily folded unit which has strength and rigidity when open. The seat and back, each of one-piece cold rolled sheet steel, have reinforcements for added strength. Steel reinforcements also give strength at moving parts where wear is heaviest. All metal parts are bonderized against rust and finished in Melamine Baking Enamel for an attractive, wear-resistant finish. Seats & Desks, Inc., 218 S. Wabash Ave., Chicago 4.

For more details circle #198 on mailing card.

Rubbermaid Shelving Prevents Slippage

A new type of shelving is available which is resistant to hot water, detergents and grease. Known as Rubbermaid Shelving, it is designed to lie flat without curling and has a ribbed surface design that prevents slippage and protects against breakage. It is available in widths of 11½ and 22 inches in 30 and 60 foot rolls. Rubbermaid Commercial Div., The Wooster Rubber Co., Wooster, Ohio.

For more details circle #199 on mailing card.

Skyrite Chalkboard Constructed for Long Life

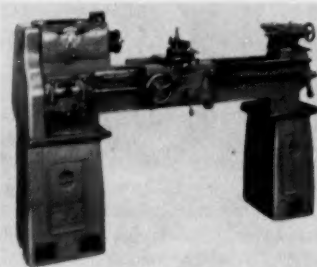
Skyrite is a ½ inch chalkboard which embodies sandwich or curtainwall construction. The Aircomb core of Skyrite is a special honeycomb material developed by Douglas Aircraft Co. which is fire-resistant, carries sheer stresses, and resists environmental factors and compression and tension loads. The back is a galvanized steel sheet and the writing surface is a special vitreous porcelain enamel, fused to 16 gauge steel under intense heat. The chalkboard will not warp, buckle or delaminate and the manufacturer states it is unconditionally guaranteed to last the lifetime of the building in which it is originally installed. Jecmen Co., 4608 W. 20th St., Chicago 50.

For more details circle #200 on mailing card.

(Continued on page 188)

All-Geared-Head Lathe in Economy Model

The "Tray-Top-ette" is an all-geared-head lathe designed especially for use in training students on tools used in industry. The economy model basic 12½ inch swing machine has all the built-in accuracies and many other features found in the Cincinnati Tray-Top. It provides twelve spindle speeds in geometric progression with an all-geared transmission. A direct-reading, three lever, color match spindle speed shift mechanism is provided. Other features of this effective teaching unit include a totally enclosed quick change box, one-piece, double walled apron, cabinet legs at both ends



with ample storage space and an operator's instruction manual. Cincinnati Lathe and Tool Co., Disney & Rogers Sts., Cincinnati 9, Ohio.

For more details circle #201 on mailing card.

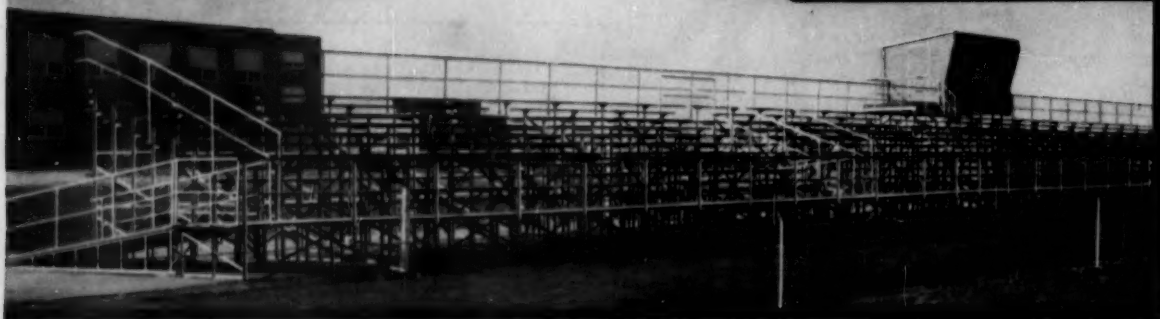
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Bleacher Seating
GALVANIZED
AF*

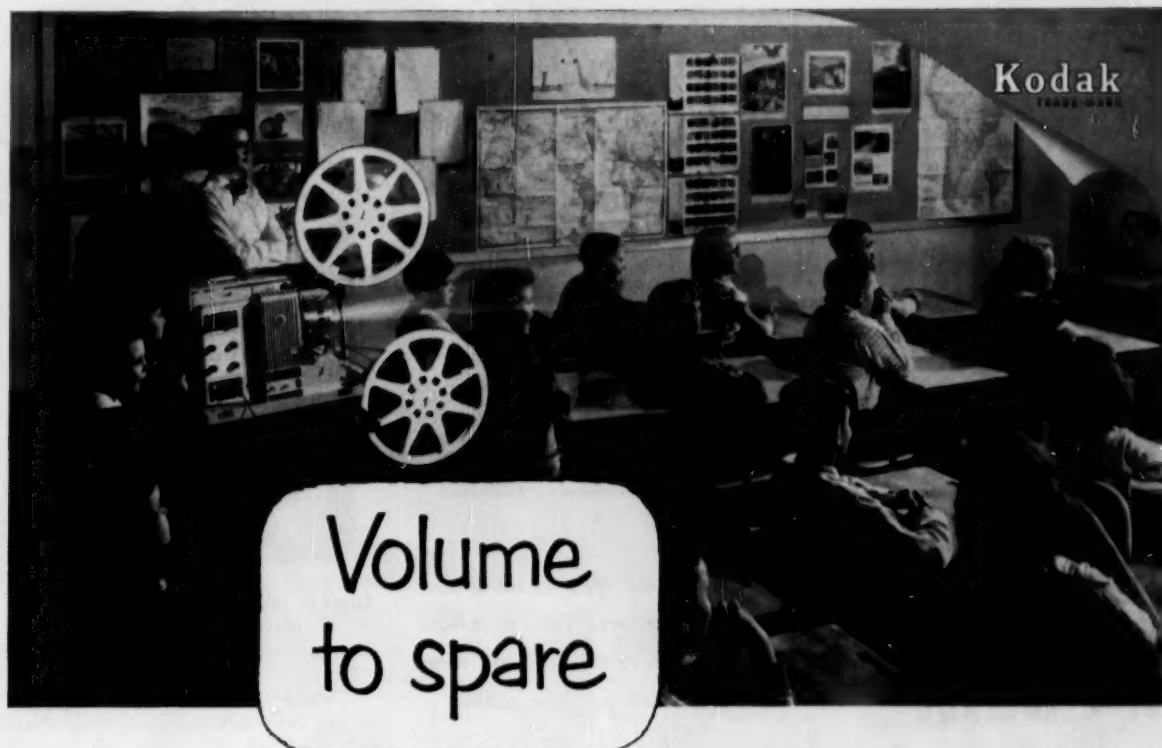
There's real significance to our emphasis of the letters **AF***. No—they are not the abbreviation of a governmental agency, nor do they denote the degree of a person's educational background. But—to school administrators, **AF*** does have important meaning. It symbolizes substantial savings in terms of dollars and cents.

AF* stands for AFTER FABRICATION.

We feature **AF** in connection with our exclusive **Galvanizing** process because it means that all steel members of **PLAYTIME** seating receive a heavy Hot-Dip zinc coating following weldment and sub-assembly. **Galvanizing AF** stops rust at manufacturing source. It eliminates for many years the necessity for painting and scraping—a factor that can make ownership of bleachers a costly liability.

If you are seeking bids on either permanent or portable athletic stands, be sure to investigate **PLAYTIME's Galvanized AF** bleachers. They'll cost you less and last you longer!





Volume to spare

It's *extra* sound-output that makes this remarkable projector one of the biggest buys in 16mm. sound projection. For the Kodascope Pageant Sound Projector, Model AV-152-S, develops 15 watts of clear, undistorted power. Yet its modest \$455 price is considerably *less* than most 10-watt projectors and only \$30 more than the standard 7-watt Pageant models.

But what does all this extra power mean to you... why do *you* need it? One very good reason is that a movie projector—like your car or any other machine—delivers its finest, smoothest performance when operating at less than full capacity. That's why this Pageant's *reserve* power is valuable even when you're operating the machine at very low volume levels. It means higher fidelity without distortion... and less background noise because of the low hum level.

Greater *versatility* is another reward of extra power. The Pageant Model AV-152-S

has all the output you need for showings in large auditoriums and hard-to-hear-in rooms—even outdoor assemblies. (And its compact, single-case portability enhances its versatility.)

What's more, this Pageant model has separate bass and treble controls that let you compensate for "boominess" or "deadness" in rooms with poor acoustics. And, as in all Pageant models, a unique Fidelity Control is built in. This makes possible precise focusing of the scanning beam, regardless of sound-track position.

Super brilliant

This single-case, 15-watt Pageant model comes in two versions: a sound-and-silent projector designated Model AV-152-S... and the sound-only Model AV-152-SE. The latter machine is equipped with Kodak's remarkable Plus-40 Shutter, which delivers more than 40% extra illumination to pro-

vide super-brilliant pictures even under adverse lighting conditions.

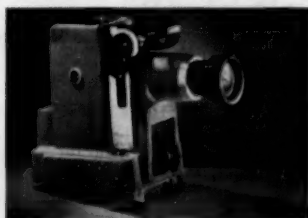
Other Pageant features

There are, in all, six Pageant models. Each is specially tailored to meet specific projection requirements. Yet, they *all* have many outstanding advantages.

Only Pageants, for example, are *permanently pre-lubricated* to by-pass the danger of under- or over-oiling, the major cause of projector breakdowns. A built-in field-sharpening element makes possible super-sharp pictures over the entire screen area. And their operation is always quiet as a whisper.

Ask your Kodak Audio-Visual Dealer for a free demonstration of these remarkable Pageant features. Or mail the coupon for your free copy of a new color catalog on the complete Pageant line.

Prices subject to change without notice.



new Kodaslide SIGNET 500 Projector, Filmstrip Model

It's completely new! And it has the smoothest, surest, fastest film-advance ever designed!

For brighter, sharper pictures, it has the Kodak Ektanon Projection Lens (f/3.5 or f/2.8), 500-watt lamp, Lumenized lens-and-condenser system, and aluminized glass reflector. Shows 2 x 2 slides as well as filmstrips.

Only \$98, with f/3.5 lens.

WHAT A-V EXPERTS SAY ABOUT PAGEANT PRE-LUBRICATION

"Pre-lubrication of the Pageant assures a maximum of trouble-free service with a minimum of maintenance. This can certainly reduce your yearly maintenance cost. Top-quality sound plus excellent picture performance and quietness in operation makes the Pageant ideal for training—in industry, church, and school."



Robert L. Edwards, Texas Educational Aids, Dallas, Texas

"We know of Pageant Projectors in schools in our area that have been running for three years and more with only a periodic checkup. Permanent pre-lubrication eliminates all the repairs necessitated by too much or too little oil. Pre-lubrication, with all the other features, makes Pageants 'tops in our book.'"



R. H. Barber, Triple S Camera Shop, Ukiah, California

EASTMAN KODAK COMPANY, Dept. 8-V, Rochester 4, N. Y. 4-62

Send name of nearest Kodak Audio-Visual Dealer and information on:

- ☐ Kodascope Pageant Sound Projectors
☐ Kodaslide Signet 500 Projector, Filmstrip Model

NAME _____ TITLE _____

ORGANIZATION _____

STREET _____

CITY _____ STATE _____

(Zone)

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**—NOW tested and enthusiastically
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Lasting Security



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 STEEL CORPORATION • KOKOMO, INDIANA

What's New ...

**Enameled Cast Iron Sink
 Especially for Classroom Use**

Designed especially for classroom and other school use, the new Kohler Tech sink has a gooseneck spout for filling receptacles and a hygienic combination faucet and bubbler fitting. The fitting diverts water into the drain when a



finger or other obstruction is placed over the fountain opening, thus preventing damage and disorder from spraying water.

The new enameled cast iron sink provides a convenient source of water in the classroom for all needs in teaching, cleaning up, drinking water, plants and other purposes. The sink is a compact, self-contained* unit measuring 24 by 20 inches overall, with a 3 inch ledge around the front and sides. Kohler Company, Kohler, Wis.

For more details circle #202 on mailing card.

**Faucet Washer Screws
 Cut Maintenance Time**

Monel "Self-Locking" faucet washer screws cut repair time and eliminate washer failure caused by faulty screw installation. Ten sizes of these "Self-Locking" screws, which can be carried in the special "Handy Andy" metal box, do the job of 37 sizes. The screws do not work loose or ruin the washer, yet they are easily removed and reuseable. J. A. Sexauer Mfg. Co., 2503-05 Third Ave., New York 51.

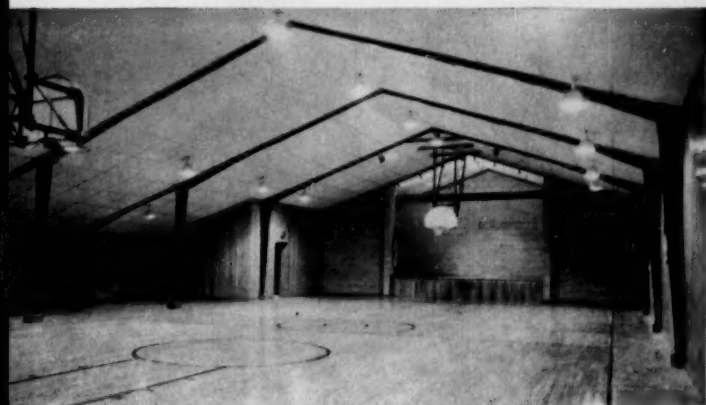
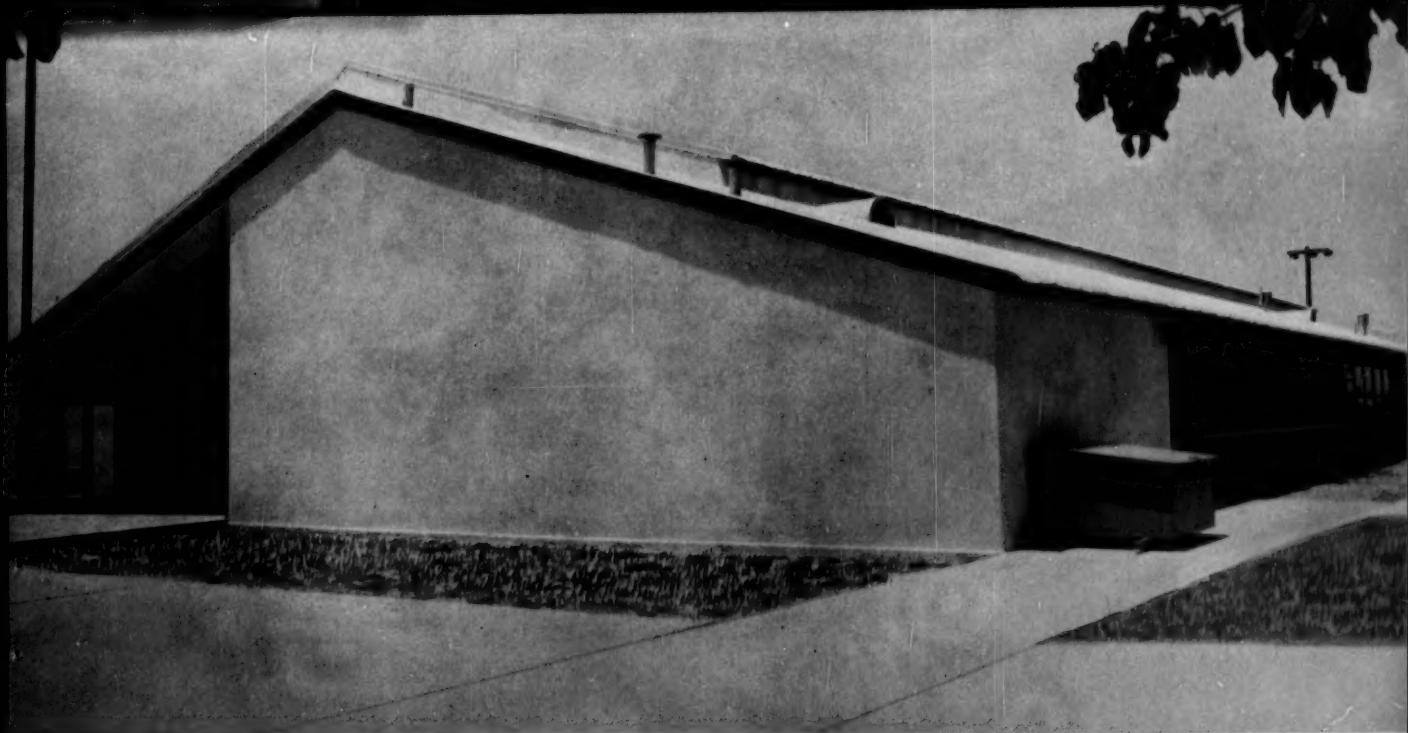
For more details circle #203 on mailing card.

**Record Series
 for Music Study**

A series of records for music study is now available in original and translation. Songs are sung in the original language with the English translation sung by the same artist on the reverse side. Translations are made to recapture the story of the song rather than using literal interpretations. The recordings are made especially for educational purposes by carefully selected singers. Epic Record Co., 243 W. 72nd St., New York 23.

For more details circle #204 on mailing card.

(Continued on page 192)



Interiors of Butler steel buildings permit most effective use of space. Note, easy-to-install insulation and space for portable bleachers.



Modern, sanitary kitchen shows adaptability and flexibility of Butler buildings. Here pupils are taught practical home economics.

You get modern good looks plus economy with **BUTLER** buildings

Modern, spacious new schools like the one above can be built at substantial savings with Butler steel buildings in combination with other materials. And what is just as important in these times of critical classroom shortage, the buildings can be erected in a fraction of the time it takes to build an

ordinary structure—sometimes in as little as six weeks! **Butler steel buildings are fire-safe**, of rigid, permanent construction, and flexible enough to be expanded quickly and economically to any size. Clear-span interiors permit room arrangements for greatest efficiency and comfort.

See your Butler dealer. He'll help you with your school building plans. And he'll show you how much faster and more economically your school can obtain the modern classrooms, auditorium, gymnasium, workshop or garage it needs by building with Butler. Contact him or send coupon now for more details.

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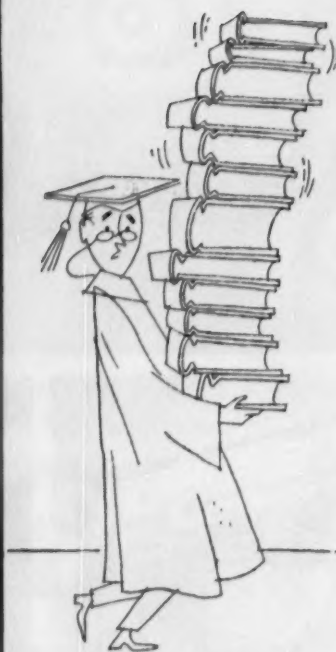
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School _____
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Classroom space requirements are heavy, too

With enrollments and building costs skyrocketing, you *have* to have more classrooms and get them at the lowest possible cost. In many places where you need more space, MODERNFOLD doors can provide it.

Large classrooms can be converted almost instantly into smaller areas for discussion groups; auditoriums into classrooms; gymnasiums into lecture halls—all with MODERNFOLD disappearing walls.

On student rooms, MODERNFOLD doors increase their occupancy capacity by freeing space once lost to door-swing. Constructed with an all-steel framework, MODERNFOLD is covered in durable, washable vinyl and comes in dozens of refreshing colors.

MODERNFOLD doors move easily into place on overhead tracks and switches, to give you space tailored to your requirements of today and flexible enough to meet tomorrow's needs.

The MODERNFOLD distributor is equipped to give you prompt service from initial planning to the completed installation. He's listed under "Doors" in city classified directories. Or write New Castle Products, Inc., Dept. D54, New Castle, Indiana. In Canada: New Castle Products, Ltd., Montreal 6.


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The NATION'S SCHOOLS



AZOGRAPH

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No. 1—the patented AZOGRAPH duplicating process. It is the fastest and lowest cost process with complete cleanliness.

No. 2—the AZOGRAPH duplicator can be used to produce spirit (aniline dye) copies.

For more information see your A. B. Dick Company distributor. You'll find him listed in the classified section of your phone book. Or, write A. B. Dick Company, 5700 Touhy Avenue, Chicago 31, Illinois



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THERE

USE your Bogen sound system for 2-way intercommunication with any classroom, for distributing recorded programs, radio broadcasts, activities originating from any classroom, emergency announcements, and for the many original applications you will think of yourself.

REGARDLESS of how much more you might spend, you cannot buy a more practical or more dependable sound system than a Bogen. Functionally designed according to the recommendations of the U.S. Office of Education, and built by the country's largest manufacturer of sound systems: David Bogen Co., Inc.

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Daylighting Product Serves Dual Purpose

Daylighting plus access to the roof are offered with the new Wascolite Hatchway. This functional building product admits overhead daylighting for corridors, closets, stair wells and other areas, and can be opened for ventilating, fire-



venting and roof access. The Hatchway can be easily installed by one man.

The factory-assembled unit consists of a white translucent or clear colorless Wascolite acrylic dome, an aluminum dome frame, and aluminum curb with compensating spring for mounting directly on the roof opening. The ruggedly constructed units are designed to withstand years of outdoor weathering. The plastic domes provide good light diffusion and light transmission without glare, are lightweight and shatter-resistant. Wasco Flashing Co., 87 Fawcett St., Cambridge 38, Mass.

For more details circle #206 on mailing card.

Pre-Wash Assembly Facilitates Dishwashing

Dishwashing effectiveness is increased and costs are reduced with the new Pre-Wash Assembly which removes all food particles and heavy grease deposits from dishes before they are placed in dishwashing equipment. The unit is easily installed and attached by separate hot and cold lines, eliminating the shearing stress of a single line attachment. A special feature of the Pre-Wash Assembly is the non-breakable Durex nozzle, especially designed to divert the stream into a wide angle spray which reaches into crevices and recessed areas. Sunroc Refrigeration Co., Glen Riddle, Pa.

For more details circle #206 on mailing card.

Water Treatment Device for Boilers

The "Chemical By-Pass Feeder" is a water treatment device which avoids excessive feed pump wear. It was developed for use where water or boiler conditions do not justify the installation of expensive mechanical proportioning equipment to treat boiler make-up water. The unit can be used to add liquid or powdered water treatment chemicals on any hot water or steam generator, regardless of make. Cyclotherm Div. United States Radiator Corp., Oswego, N.Y.

For more details circle #207 on mailing card.

(Continued on page 196)



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FOLDING
BANQUET
TABLES

Direct Prices &
Discounts to
Schools, Churches,
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Full line of
folding chairs

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MONROE TRUCKS

Transport and store your folding tables and chairs the easy, modern way with Monroe All-Steel Trucks. Each truck is designed to handle either tables or chairs. Construction of Truck No. TSC permits storage in limited space.



Above: Transport-
Storage Truck No.
TSC

Right: Transport
Truck No. TP



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NEW CATALOG, No. 300,
PRICES AND DISCOUNTS

THE MONROE COMPANY
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DOOR HOLDERS

A Style and
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The Only door holder with removable
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Shoes that will not mar any floor or
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See the Complete Line of Grand Safety Door
Holders on Display at your Hardware or Lumber
Dealers ——— SEND FOR CATALOG

GRAND SPECIALTIES CO. Dept. 18, Chicago 22, Ill.



Introducing...

a terrific new kind of LINEN tennis net

Tested a full year! Brand New Invincible LINEN net found tougher, lower priced and lighter weight than other normal brands

Here's an exciting new concept in tennis net design! Check the eight excellent Invincible features below.

Then visit or call your Invincible dealer for the complete story. Or write us for his name.

STRONGER CANVAS TOP

New "number" canvas replaces standard "ounce" canvas used in ordinary nets. So superior you actually see difference with your naked eye.

THINNER (STRONGER) LINEN CORD

This new linen net uses 36-cord instead of thicker 48-cord. Means more beauty, better visibility.

LIGHTER WEIGHT

Weighs 13 pounds—that's 6½ pounds lighter than the average net—yet is much more durable.

GREATER TENSILE STRENGTH

Tensile breaking strength is 144 lbs. Heavier 48-cord normally breaks at 104 lbs. Strength equal to 60-cord cotton.

COAL TAR TREATED

Net is carefully and thoroughly coal tar-treated preventing mildew or rot.

PATENTED "CLIPPED" CORNERS

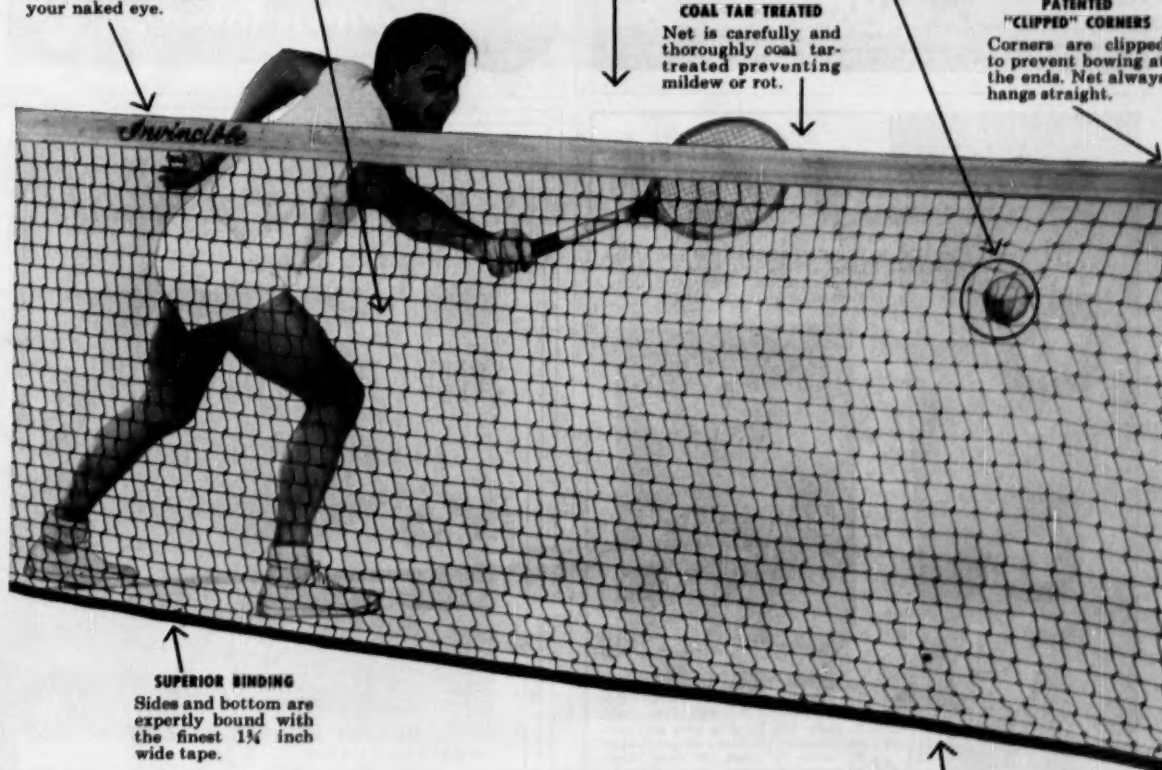
Corners are clipped to prevent bowing at the ends. Net always hangs straight.

SUPERIOR BINDING

Sides and bottom are expertly bound with the finest 1½ inch wide tape.

LOWER PRICE

Lighter weight and easier handling make for lower price than regular 48-cord nets.



**Invincible Nets
EDERER Division**

THE LINEN THREAD COMPANY INC.

540 North Orleans Street, Chicago, Illinois

Invincible nets
are made in
America



STEAM COOKERS



VEGETABLE PEELERS



DISH WASHERS



STEAM TABLES

Now is the BEST time To Get Your Equipment

This is the time to buy kitchen and lunchroom equipment and supplies for the coming year with those reserve funds you've managed to save. Put that allocated money to work NOW — and end the semester with your needs fulfilled and all paid for. You can get all your food service requirements — from dishes and dishwashers to cutlery and ranges — from among the 50,000 items sold by DON.

Prompt Delivery WHEN YOU WANT IT!

Place your order now and you'll receive the equipment and supplies anytime you specify. Take advantage of this opportunity for which you have planned, and be prepared for the Fall Semester from the funds still on hand. As always — *Satisfaction Guaranteed or Money Back!*



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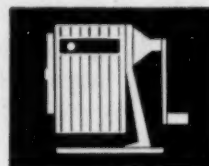
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Now, it's all right if you...



send a boy to do a man's job!

Student monitors can change worn, dull cutters on all Apsco Pencil Sharpeners in one convenient, clean operation. It's the latest in pencil sharpener maintenance development—the new "COMPLETE" CUTTER HEAD ASSEMBLY.

Revitalize your Apsco Pencil Sharpeners regularly.

Order an adequate supply from your stationer today.

Specify, too, Apsco Pencil Sharpeners, Staplers, and Punches—your guarantee of quality.



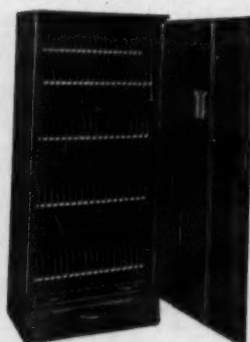
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ALL STEEL COMBINATION STORAGE UNITS

YOU CAN BE SURE that your stored films will be safe from dust, heat or dryness with NEUMAIDE COMBINATION STORAGE UNITS!



Model MM-119—A practical storage cabinet for the varied film library. Holds 400, 800, 1200, 1600 ft. reels; 100 filmstrip cans plus utility drawer in base. Overall size: 36" wide, 70" high, 16" deep. Over 50 models to choose from. Write for free catalog.

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PROTECTS YOUR FILM!



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SPECIAL TWELVE PAGE PICTORIAL AUDIO-VISUAL PORTFOLIO



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For Information On How To
Reduce Your Floor Maintenance Costs

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WITHOUT OBLIGATION, please send information about
best way to take care of floors made of:

Approximate floor area: square feet.

Company:

Street:

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General

EXTRA HEAVY-DUTY MACHINES

No Matter What Your Floor Problem,

All GENERALS are heavy-duty machines. Quiet, easy, money-saving operation—perfectly balanced! Wax! Polish! Buff! Dry Clean! Refinish! Sand! Scrub! Shampoo Rugs! Use everywhere—on wood, asphalt, tile, marble, rubber, linoleum, cork, terrazzo.

Sealed-in lubrication. Minimum brush replacement.

It's GENERAL for Maintenance-free operation. Engineered the quality way—to last!

Rug shampooing attachment available on Models 14, 16, 18.



• Regardless of your floor problem, there's an engineered GENERAL to "fit the job." Write for proof and Folder NS2

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COMMERCIAL VACUUM CLEANERS

GENERAL Guarantees Complete Satisfaction!

Specify GENERAL COMMERCIAL VACUUM CLEANERS for more of everything!... 1½ Horsepower, 70" Water Lift, Air Volume, Speed, Economy, 1-2-3 Ease on Dry and Wet Pick-up.

**WORLD'S FASTEST
HOSE ATTACHING!**

Ball-bearing, swivel snap attachment ends time-wasting coupling, and uncoupling nuisance. 35-foot cord goes everywhere! Powered by the perfect By-Pass Motor! Tested and approved!



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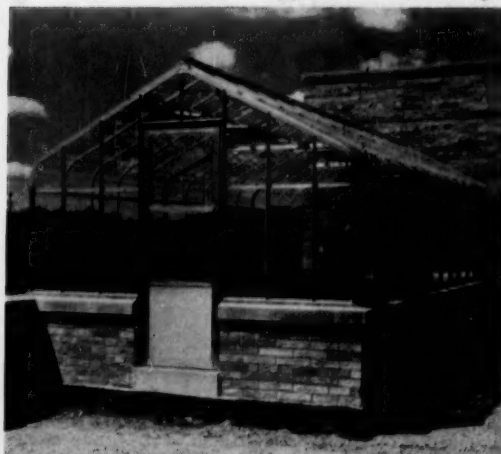


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Established 1930—World's Only Mfr. of Complete Line of Floor Machines

Everlite[®] ALUMINUM GREENHOUSES

offer everything you ask for in a school installation!



MODEL E-2 THREE SECTION

So perfectly does the Everlite meet and exceed the special requirements for school and institutional use, that it might have been custom designed to your architect's specifications. Check these standard features that make Everlite the outstanding buy for your school installation...!

1. LONG LIFE—Ageless Alcoa aluminum alloy extrusions and castings...nothing to rust, rot, sag, shrink, swell or warp.

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3. BEAUTIFUL APPEARANCE—Harmonizes with any type architecture...approved by leading architects as a wise investment of school funds.

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5. ABUNDANT VENTILATION—Wide vents extending full length of house with weatherproof, continuous-socket hinge.

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7. COMPLETE ACCESSORIES—One source for automatic heating and ventilating equipment, Transite benches and everything needed.

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9. EXPANDABLE—Standardized sections permit easy, low-cost expansion.

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Aluminum Greenhouses, Inc.

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What's New ...

Self-Closing Lids for Ash and Garbage Cans

A new type of self-closing, push-top lid is now available for the Witt line



of heavy duty ash and garbage cans. Made of 24 gauge Witt Perma-Zinc sheet steel, the push-top lid is available in 16, 18 1/4 and 20 1/2 inch outside diameter sizes for 20, 27 and 33 gallon sized cans. An inside tension spring keeps the 8 1/2 inch opening in the lid firmly closed when not in use. The lids produce more sanitary type refuse receptacles as they fit snugly yet are easily removed for emptying. The Witt Cornice Co., Dept. 21, 2118 Winchell Ave., Cincinnati 14, Ohio.

For more details circle #208 on mailing card.

Waste Disposers for Heavy Duty Applications

Four new powerful models have been added to the line of institutional Waste

King Pulverators. Designed for heavy volume food service, the units are capable of pulverizing up to 2000 pounds of mixed garbage per hour. Each of the four new models comes complete with all necessary controls and fittings and is designed to fit the needs and locations of most institutions. Given Mfg. Co., 3301 Fruitland, Los Angeles 58, Calif.

For more details circle #209 on mailing card.

Floor Products

Wax and Buff in One Operation

"First" Wax Concentrate and "Econoplier" are a new wax concentrate and applicator which enable the operator to buff and wax simultaneously. The "Econoplier" will fit any floor machine. The motion of polishing mechanically spreads the "First" Wax Concentrate immediately ahead of the brush. No drying time is required and one operation applies the equivalent of three coats of ordinary wax. Piatt & Smillie Chemicals, Inc., 2322 Olive St., St. Louis 3, Mo.

For more details circle #210 on mailing card.

Super Cuber

Makes 500 Pounds of Ice Daily

Built to specifications requested by schools and other institutions using ice cubes, the new Scotsman Automatic Super Cuber makes 500 pounds or 10,000 Super-Cubes of ice per day. It is designed

(Continued on page 200)

to occupy no more floor space than models with considerably less capacity and produces a round, completely solid, crystal clear cube with no hole.

The SC-500 Super-Cuber features "Cycle-Matic" controlling, a system that automatically compensates for unpredictable changes and variances in room temperature, water temperature and water supply pressure. The solid ice cubes are uniform and slow melting, the machine requires low water and power consumption, it is easily installed and



has automatic operation. American Gas Machine Co., Division of Queen Stove Works, Inc., 505 Front St., Albert Lea, Minn.

For more details circle #211 on mailing card.



DISHWASHING BY ATLAS COSTS LESS THAN BY HAND



Whether you employ a dishwasher or wash your own dishes, you cut labor costs in half with an Atlas dishwasher. It cleans a basket-full in 30 seconds, freeing its operator for other duties. Exclusive "Figure 8" Directional Flow forces hot, soapy water in and around every surface of every dish, cutting grease and dirt like magic. A constantly-changing, 180 degree rinse assures positive sanitation and complete health authority approval. And with less dish handling, there's less dish breakage. It adds up to this: hand labor cannot compete with an Atlas dishwasher. Write today for pamphlet and data on how an Atlas will pay for itself in one year.

Light NEW
Plastisol-coated basket
protects dishes,
lasts longer



Much lighter than old-style baskets, new Atlas with Plastisol-coating resists food acids, greases, and hot water. Won't mar, scratch, chip, or discolor dishes. Extended handle protects basket-bottom from scuffing. Standard equipment on all Atlas dishwashers.

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Do They HAVE THE PROTECTION OF THE WORLD'S SAFEST BRAKES?

**Make it your responsibility
to be sure they do!**

**Insist that ALL new school buses be equipped with
BENDIX-WESTINGHOUSE AIR BRAKES**

WHY AIR BRAKES? The answer, of course, can be stated in one word—*safety*. Look at it this way. The greatest assurance of safety in school bus operation is a braking system powerful and dependable enough to meet any emergency. *Air Brakes* deliver more power, faster and surer than any other type of brakes available. Proof of this can be found in the fact that *virtually every commercial bus in the United States is Air Brake equipped*. Commercial bus operators can't take chances on passenger safety—they demand the world's safest power-to-stop!

HOW TO GET THEM. It's simple. First, if you are buying new buses and are asking for competitive bids, insist that *all* bids submitted include *Air Brake* equipment. This way, the buses you ultimately choose will come from the factory *Air Brake* equipped. Secondly, you can modernize your present buses with handy field conversion kits—there's one designed for every make and model bus. Just call your Bendix-Westinghouse Distributor and he will make all arrangements—you'll find him in the yellow pages of your telephone directory.



**WRITE FOR FREE
INFORMATIVE BOOKLET**

Here's the complete story on how much *Air Brakes* can contribute to school bus safety. Write to the factory today.

THE BEST BRAKE IS AIR... THE BEST AIR BRAKE IS

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BENDIX-WESTINGHOUSE AUTOMOTIVE AIR BRAKE COMPANY

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L3374—lock,
automatically
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door handle.



L3378—manual
deadlock. Super-
visor's control key
and easily
followed setting
instructions
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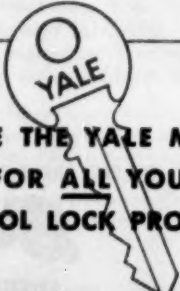


• Some schools still go through the needless confusion and waste of students' and teachers' time for "locker key assignment" in the fall, and then the "key refund" in June.

In between, book-keeping, duplicating lost keys, and attempts to maintain supervision and security with obsolete and inadequate locker closures takes up still more hours of costly personnel time.

All of these things can be completely written off by switching to Yale combination locks. These smoothly operating mechanisms provide dependable security year after year, with extremely simple and effective administrative control. Write for

descriptive folder, or check with your locker manufacturer. The Yale & Towne Mfg. Co., Lock & Hardware Div., Stamford, Conn.



**SEE THE YALE MAN
FOR ALL YOUR
SCHOOL LOCK PROBLEMS**

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"It's like waxing your floors with a film of plastic"

WHEN you apply new SUPER WESTWAX it's just like laying down a protective sheet of tough, transparent plastic on your floors. With NEW SUPER WESTWAX you get

- brilliant gloss
- extra durability
- freedom from discoloration
- easier maintenance

Why? Because this heavy-duty formulation contains —
West's crystal clear Plastic Emulsion, MIRITE®
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prime #1 yellow Carnauba Wax.

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- requires no polishing

And SUPER WESTWAX is slip resistant — meets Underwriters' Laboratories requirements for floor treatment materials.

Let a West floor expert demonstrate SUPER WESTWAX on your own floor — show you how easy it is to use. No obligation, of course. Just send the coupon.

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PLASTIC
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OLDEST AND LARGEST
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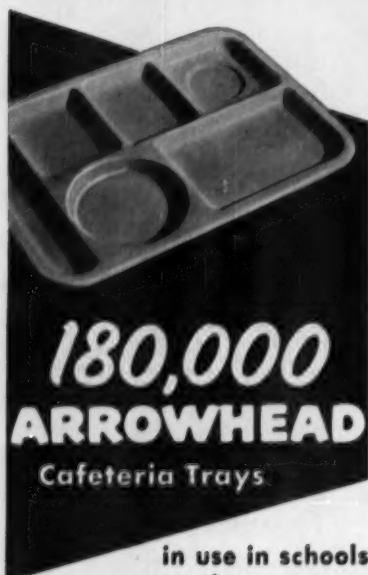
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What's New ...

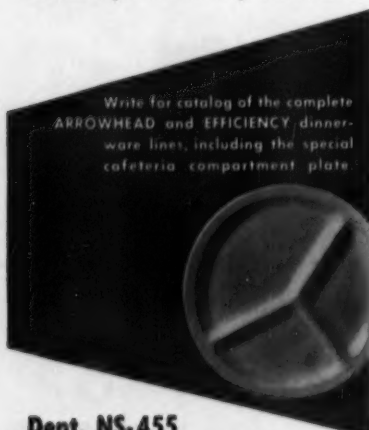
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answers
to school cafeteria
budget problems



180,000
ARROWHEAD
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in use in schools
across the country...
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at minimum cost!

- No chipping! No breaking!
- Serve a whole meal in one unit.
- Stack easily. Wash easily.
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- Scientifically designed of Melmac plastic in 5 pastel colors.



Write for catalog of the complete
ARROWHEAD and EFFICIENCY dinner-
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cafeteria compartment plate

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international molded plastics, inc.
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Year-Round Air Conditioning With Unarco "Dual-Vector"

Year-round air conditioning is now possible at a low price with the new Unarco "Dual-Vector" hot and chilled water heating and cooling system. It



can be easily installed in existing wet-heat structures as well as in new buildings and provides a completely flexible system of balanced air conditioning for any sized room. Winter dirt and summer pollen are trapped in the filters and clean, quiet, even heat is provided in winter with cool, dehumidified air in summer. A unit fan control permits individual room temperature and humidity capacities which can be operated thermostatically or by manual settings. Union Asbestos & Rubber Co., Heating and Cooling Div., 332 S. Michigan Ave., Chicago 4.

For more details circle #212 on mailing card.

Rubber Floor Tile Has Tweed-Textured Surface

"Do All Tweed Corded Rubber Tile" is a new non-porous, resilient floor tile. The tweed-textured surface is durable and fade resistant and the tile has high sound absorbing qualities. The new tile may be applied directly to concrete, wood and steel floors using any good rubber tile adhesive. American Mat Corp., 1719 Adams St., Toledo 2, Ohio.

For more details circle #213 on mailing card.

Lighting Fixtures for Corridors and Utility Areas

Engineered to be joined snugly together, end to end, and to create a clean line of light formed with the units, "Modular Sightrons" are new lighting fixtures suitable for use in the corridors and utility areas of schools and hospitals. Designed for ceiling or wall mountings, the fixtures have injection-molded, pure white diffusers of polystyrene, with matching baked white enamel housings. "Modular Sightrons" are available with either two foot, 20 watt trigger start fluorescent lamp or with one or two four foot, 40 watt rapid start lamps. Light-olier, 346 Clairmont Ave., Jersey City 6, N.J.

For more details circle #214 on mailing card.

Solar Glass Block Protects Against Excessive Heat

Designed especially for use in areas with severe sun conditions, the new Owens-Illinois No. 80-F solar glass block rejects unwanted solar heat and light. The special-purpose glass block is designed for southern exposures to protect against undue heat and light when the sun is at or near 45 degree altitude. Above and below the 45 degree band acceptance of light gradually increases and the block is particularly efficient in transmitting cool ground reflected light.

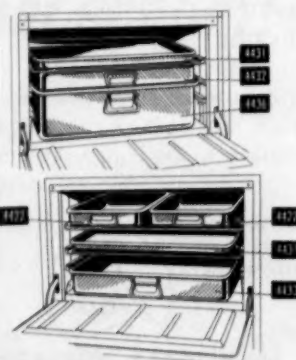
The construction of the new solar glass block is such that light is reflected rather than absorbed, without entering the block, thus protecting against the sun's rays. The No. 80 matching block, designed for maximum utilization of cool north light, omits the diffusing screen in the center. Kimble Glass Company, Toledo 1, Ohio.

For more details circle #215 on mailing card.

Aluminum Pans for Modern Ranges

A set of seven new Wear-Ever aluminum roasting and baking pans has been developed with straight sides to utilize oven space to the best advantage. Several different baking combinations can be arranged in each oven with the new line which is designed for use in modern ranges now used in institutional kitchens. Time and fuel are saved by the arrangements possible with the new pans.

Included in the line are two types of pans, one for full-oven size and one for twin-oven size, with the shallow pans designed to serve as covers or as separate roasters. When the shallow pans are used as covers the unit becomes a steam-seal roaster. At least fourteen different combinations are possible with the set of new pans which are made of hard



aluminum alloy with seamless construction throughout for easy cleaning and sanitation. A spring-type handle makes for easy handling and no waste space. The Aluminum Cooking Utensil Co., Inc., New Kensington, Pa.

For more details circle #216 on mailing card.

(Continued on page 204)

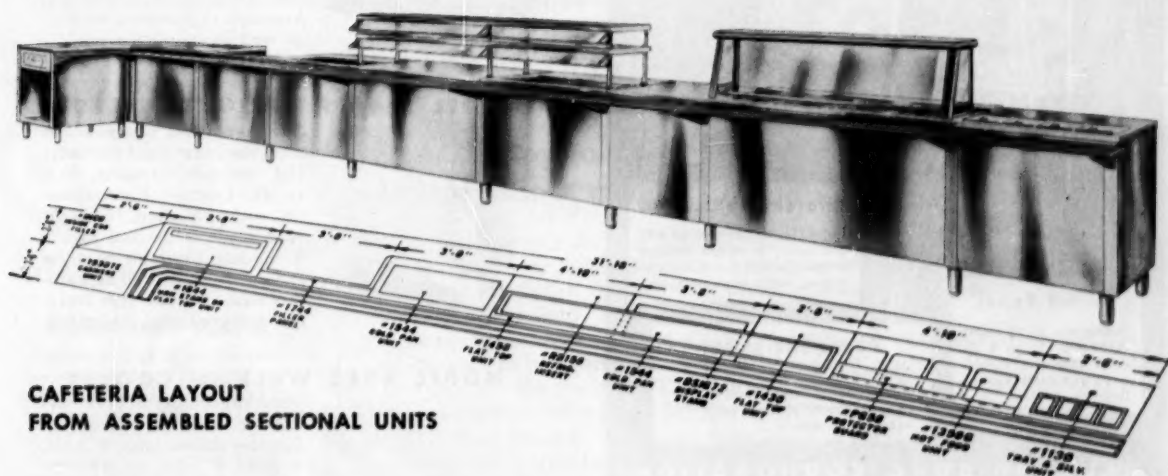
Sectional FINEST CAFETERIA COUNTERS FOR INCREASED ENROLLMENT



Fall is nearer than you think—many more children will hear the school bell ring.

If your present feeding facilities are overburdened now—plan to meet the bigger load well in advance of the Fall needs.

Southern Dealers all over America are highly trained specialists in food preparation and food serving equipment. Consult one today—or write Southern Equipment Co., 5218 South 38th St., St. Louis 16, Missouri.



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SOUTHERN EQUIPMENT COMPANY

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Central Control Dual-Channel
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Unsurpassed Educational Tool: The RAULAND 5220 All-Facility Console gives you modern, smooth administrative control of the entire school plant. Available to serve up to 80 rooms, the system performs every conceivable function: distribution of administrative information, radio broadcasts, recorded music, school entertainment, instruction—plus instant 2-way intercommunication with all classrooms. Available also in 5120 Console model, less desk. The last word in School Sound—quality-built to remain modern for years.

Your Choice of Every Desirable Program Facility

Program Panel

Selects any of 3 microphones or Room Return; mixes with any of 4 programs: Radio, Phonograph, Recorder or Remote Line. (Second program channel is combined with intercom panel.)

**One-Operation
Emergency,
All-Call and
Pre-select
Switch**

FM-AM Radio

Selects any radio program on the complete FM band or the entire AM standard broadcast band.

MODEL
5220

Intercommunication

Permits 2-way conversation with any room; as second program channel, selects any of 2 microphones, radio or phonograph.

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Selects any or all rooms (available with up to 80 room capacity) for all program distribution functions.

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Choice of Automatic Changer playing all record sizes and speeds, or Transcription Player playing up to 16" records of all speeds.

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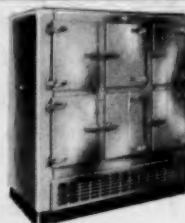
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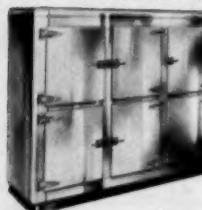
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Freezers and Coolers

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Self-contained. For kitchen, bakery, pantry, or salad preparation. Capacity, 55.8 cu. ft. Exterior dimensions: 78" wide, 32" deep, 76" high. Accommodates 18x26" serving trays. Also made in 4-door model. Available in white baked enamel-porcelain as well as stainless steel.

MODEL RSS66 REACH-IN



For remote installation. Assures complete food conditioning. Capacity, 62 cu. ft. Exterior dimensions: 82" wide, 32" deep, 71" high. Also made in 2-door, 4-door and 8-door models. Offered with glass doors, if desired. Available in porcelain enamel as well as stainless steel.

MODEL SS40FP UPRIGHT FREEZER



Self contained. Designed to meet the most rigid commercial demands. Capacity, 40.2 cu. ft. Exterior dimensions: 68" wide, 32" deep, 76" high. Also made in 20 and 30 cu. ft. models. Available in white enamel finish as well as stainless steel. Remote type freezers are available, if desired.

MODEL 8885 WALK-IN COOLER



Permits economical bulk buying for menu diversification. Exterior dimensions: 8' wide, 8' deep, 8' high. Shown with white baked enamel finish on steel. Also available clad with stainless steel. Many other sizes can be obtained in single or multiple compartments.

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DEPT N., COMMERCIAL REFRIGERATION DIVISION**

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P-A-X telephone communication will give you better school administration

Added cost: 0.25%

The cost of P-A-X for the average school—large or small, for old or new buildings—runs to less than $\frac{1}{4}$ of 1% of the cost of the building.

In addition, since the school owns its P-A-X, there are no further costs beyond negligible maintenance.

The business men on your school building committee will understand why you want P-A-X, the private "inside" telephone system. For thousands of business concerns use P-A-X to keep *their* organizations running smoothly, to eliminate confusion and delay.

In the business of running a school, the P-A-X System helps every member of the staff to be more efficient. Quietly, quickly, without disturbance to classes, it completes the thousand-and-one contacts needed every day between school administrators, office staff, faculty, maintenance and service departments.

P-A-X is a system of regular telephones, separate from the public telephone system. Dial-controlled, this telephone system provides direct, *private* communication anywhere in the school, without delay. In addition, it offers "Auxiliary Services" to meet specific school needs.

School administrators in growing numbers are specifying P-A-X Telephone Systems in their buildings—new or old. Write: Automatic Electric Sales Corporation, 1033 West Van Buren Street, Chicago 7, Illinois.



P-A-X

business
telephone
systems

AUTOMATIC ELECTRIC

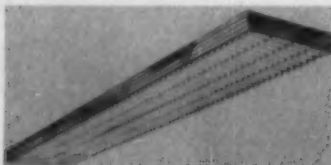
What's New ...

Exterior Masonry Paint Is Rubberized

A new rubberized paint for exterior masonry surfaces has been introduced. The special formula of the paint permits any interior moisture to be released without causing blisters while retaining its waterproof exterior. Known as Cementide Rubberized Masonry Paint, it is a polyvinyl acetate formulation which is easy to apply by brush, roller coater or spray. It is a water emulsion paint requiring no petroleum or coal tar solvents, no primer or sealer, and it dries quickly. It is available in eight colors and white and provides a practical, durable finish. Pittsburgh Plate Glass Co., 632 Fort Duquesne Blvd., Pittsburgh 22, Pa.

For more details circle #217 on mailing card.

Shallow, Slim Fixture Offered in Louverlite



Only slightly more than three inches in depth, the new Louverlite Slimline has clean, slim lines for beauty as well as

even, comfortable and direct illumination. The new lighting fixture is available in 4 and 8 foot units for two and four T-12 430-MA lamps. The two or four Rapid Start Bi-Pin Louverlite is also available and the unit may be purchased with steel or translucent plastic side inserts.

The Louverlite Slimline is designed for totally direct light distribution but removable sections in the top reflector permit varied uplighting effects if desired.

The Slimline unit can be mounted individually or in continuous rows, surface or pendant mounted. Louvers are hinged from either side for easy maintenance. Smithcraft Lighting Division, Chelsea 50, Mass.

For more details circle #218 on mailing card.

Safety and Attractiveness in Children's Scissors

Until "Penguin Pete" appeared on the scene there was apparently little imagination used in designing scissors for use in kindergarten and primary grades. The new scissors now available for this purpose are designed to keep fingers below the cutting surface to protect them and to facilitate following lines and patterns.

"Penguin Pete" scissors cut smoothly, even through heavy paper. Blades and

wearing parts are of steel and the body is reinforced styrene in red, blue or green. The scissors are attractive and



intriguing in appearance and should encourage more careful work. John Ahlbin & Sons, Inc., 188 Garden St., Bridgeport 5, Conn.

For more details circle #219 on mailing card.

High-Gloss Floor Wax Is Non-Slip

Floors dry to a hard lustrous mirror-like sheen without buffing or polishing when waxed with Super Westwax. This new water-based floor wax is listed by Underwriters' Laboratories as an anti-slip floor maintenance product, making it especially suitable for use in schools. Super Westwax has unusual wear resistance and a single application usually is adequate for normal floor protection. West Disinfecting Co., 42-16 West St., Long Island City 1, N.Y.

For more details circle #220 on mailing card.

(Continued on page 208)

THE IRWIN UNI-DESK

No. 454



Irwin Seating Company GRAND RAPIDS MICHIGAN

The definite superiority of the IRWIN UNI-DESK exemplifies the comprehensive design and sound construction characteristic of the entire IRWIN line which includes seating for every school and auditorium requirement. To make your budget do maximum duty write for the IRWIN catalog, NOW.

ONLY THE IRWIN UNI-DESK PROVIDES ALL these IMPORTANT FEATURES—COMPARE	IRWIN UNI-DESK	DESK A	DESK B	DESK C	DESK D
ONE PIECE DESK TOP	X				
G-E TEXTOLITE DESK TOP	X				
ONE PIECE FORMED STEEL BOOK BOX	X	X	X		
OUTSIDE ROLL ON BOOK BOX EDGES	X				
CONVEX EMBOSING ON BOOK BOX BOTTOM	X				X
BOOK BOX AND CHAIR ADJUSTABLE FOR HEIGHT	X	X	X	X	
LONGITUDINAL FRAME ADJUSTMENT	X				
CRADLE-FORM SEAT	X	X			
90° SWIVEL SEAT	X	X	X	X	
AUTOMATIC SELF-LEVELING DEVICE	X				
HARDENED AND POLISHED RUBBER CUSHION GLIDES	X			X	X



knock down classroom noise—safely fire-safe Fiberglas Acoustical Ceilings soak up sound!

The clamor of busy classrooms can be cut as much as 80 per cent when a ceiling of Fiberglas® Sound Control Products is on the job. Not only do these ceilings actually soak up sound, they're fire-safe too—meet the strictest building codes.

Beauty That Lasts—You'll find that inorganic Fiberglas Sound Control Products make ideal ceilings for school use. They won't swell, shrink or sag. They're sanitary, easily in-

stalled, easily maintained and long-lasting. A Fiberglas Ceiling even provides an added measure of thermal insulation, cutting heating bills.

Economy That Counts—There's sure to be a ceiling that suits every noise-spot in your school in the wide range of patterns, textures and colors available. And, surprisingly enough, for all their extra value, Fiberglas Ceilings are the lowest cost fire-safe ceilings you can buy!

Send for Booklet—"The Quiet Red Schoolhouse" tells more about Fiberglas Acoustical Ceilings and how they can improve teaching and learning conditions. It's free! Write: Owens-Corning Fiberglas Corporation, Dept. 140-D, Toledo 1, Ohio.



New Larger Tile Units—Lower installation costs and fewer grid lines are two plus benefits with new larger unit (24" x 24") Fiberglas tile.

*Fiberglas, Sonofaced (Reg. U. S. Pat. Off.), Stria and Noise-Stop are trade marks of Owens-Corning Fiberglas Corp.

OWENS-CORNING
FIBERGLAS

SOUND CONTROL PRODUCTS

- Textured, Perforated, Sonofaced®, Stria® Acoustical Tile
- Textured, Sonofaced Ceiling Board, Noise-Stop® Baffles

With only 25 moving parts...



AMWELD® EASI-FOLD **is a SAFER bleacher!**

You can make your next school job absolutely safe with Amweld Easi-Fold Bleachers. A triumph of engineering skill, these folding bleachers cannot collapse. Open supports are braced and locked — cannot fold in use. Special design eliminates danger of pinched fingers or legs.



SEND FOR INFORMATION

Amweld Easi-Fold Bleachers are ideal for all indoor spectator seating. Write for details today or see our catalog in Sweets' Architectural File No. 22.

INSTITUTIONAL PRODUCTS DIVISION
THE AMERICAN WELDING
AND MANUFACTURING COMPANY

331 DIETZ ROAD • WARREN, OHIO



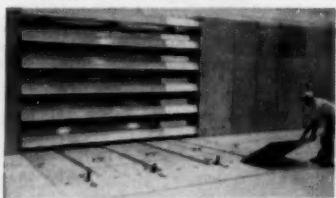
EASIER SWEEPING

Under structure is simple and uncluttered — makes "after game" clean-up quick and easy — plenty of room to push a floor brush.



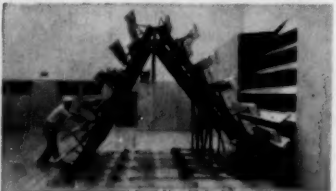
FOLDS FLAT AGAINST WALL

When not in use, Amweld Easi-Fold Bleachers fold up — out of the way — yield an extra bonus in usable floor space.



COMPLETE FLOOR PROTECTION

Floor protected when Bleacher is opened. Casters and vertical supports rest on protective cover — cannot mar expensive wood floors.



ONE MAN CAN OPERATE

Easi-Fold Bleachers roll out smoothly — are perfectly balanced for easy one-man opening and closing.

The NATION'S SCHOOLS

TODAY'S MOST MODERN
COMMERCIAL GAS COOKING
EQUIPMENT SPECIALLY
DESIGNED FOR MODERATE
SIZED KITCHENS

NEW

New features and
styling, easy to keep clean
and new-looking.

MODERN

Streamlined design
throughout. Double-wall,
double strength elevated shelf

THRIFTY

Saves fuel. Saves
operating time. Saves
cleaning time.

DURABLE

Formed steel construction
provides maximum strength.
Welded joints are tight forever.

*Available in Stainless Steel
(as shown), Black Japan, or
Lustre-Line gray finishes.*



Magic Chef

CAFE LINE

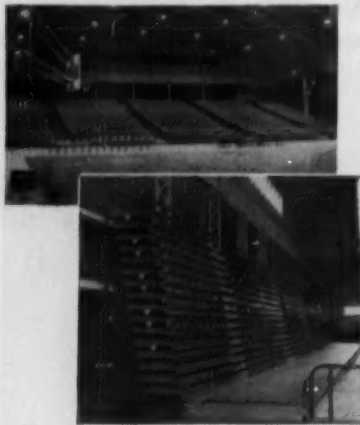
**commercial GAS
cooking equipment**

FOR INFORMATION WRITE Magic Chef, Inc., St. Louis 10, Missouri

What's New ...

Folding Bleachers Telescope Against Wall

The Telescopic Chair Stand provides a complete bleacher or other seating facility in a folding unit. The entire unit of seats folds back against the wall to provide maximum floor space when the building is not being used for spectator activities. The compact unit pulls



down into a comfortable seating arrangement with rigid, safe chairs when unfolded. The stand is easily brought into use or folded back for storage. Berlin Chapman Company, Berlin, Wis.

For more details circle #221 on mailing card.

Liquid Graphite Pencil Has Unbreakable Point

Liquid graphite is used in a new pencil which cannot wear or break its point. Since the writing tip of the new pencil is not affected by wear, the line width does not vary. More than six times as much writing as a conventional lead pencil is promised from the new writing tool.

The liquefied graphite in suspension is described as having writing characteristics identical to graphite in solid form except that it does not smudge. The permanent writing tip has the same linear width as a sharpened lead pencil, the dimensions and forms of the new pencil being determined by research conducted by the manufacturer in conjunction with the University of Wisconsin over a two year period. The Parker Pen Company, Janesville, Wis.

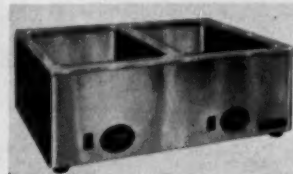
For more details circle #222 on mailing card.

Food Storage Units for Counter Use

The Scotty Electro-Matics are counter units designed for dry or moist hot food storage. The one-piece stainless steel clad wells used on the Seco-Matic Food Tables are used in the new Electro-Matics which have standard 12 by 20 inch openings to accommodate any of the hundreds of Seco-Ware food storage pan combina-

tions. Each well is individually controlled to provide either dry or moist uniform heat concentration around each food.

Each of the new completely redesigned units has an overall height of 10 1/4 inches



and is equipped with a Westinghouse Corox 800 watt heating element with thermostatic control. Two standard sizes are available, one opening and two opening. Seco Company, Inc., 5206 S. 38th St., St. Louis 16, Mo.

For more details circle #223 on mailing card.

Improved Mopping Buckets Have Snag-Free Joint

Geerpres 32 and 44 quart mopping buckets have been improved by a recessed body bead which strengthens the bucket and provides a snag-free, interlocking joint between the body and the heavy steel reinforcing band. The new buckets incorporate all standard Geerpres features. Geerpres Wringer, Inc., Muskegon, Mich.

For more details circle #224 on mailing card.

(Continued on page 212)

BUILD Charm

INTO YOUR SCHOOLS...

as you lower costs with safe, long-lasting timbers

Here is school construction of forthright simplicity and unaffected natural charm. Four-inch thick Tim-Deck of beautiful Western Red Cedar is applied directly to glulam timber girders, eliminating closely spaced joists and supplying sheathing, insulation and ceiling finish all in one fast, labor-saving application. With the timber columns supporting the roof load, relatively light and inexpensive outer walls are adequate, giving further economy to the building.

For data on other cost-saving timber applications, see your Timber Structures, Inc. representative, or write for booklet, "Modern Functional Schools". It is free upon request.

Cafeteria of Centerline High School, Centerline, Mich., is 66'-8" x 62'-4". Glulam timber girders resting upon glulam columns are spaced at 12'. Architects: Brender & Van Reyndam, Detroit; Atkin-Ferdon Co., Detroit, is general contractor.

TIMBER STRUCTURES, INC.

P. O. BOX 3782-M, PORTLAND 8, OREGON

Offices in Ramsey, N. J.; Garden City, N. Y.; Chicago; Ferndale, Mich.; Kansas City; St. Louis; Minneapolis; Boston; Columbus; Des Moines; Decatur; Wichita; Dallas; Houston; Birmingham; Charlotte; Memphis; West Hartford; Seattle; Spokane; Denver.

TIMBER STRUCTURES, INC. OF CALIFORNIA • Richmond, California

Local Representatives throughout the United States and Canada



value
assured

Arlington No. 550 MOVE ABOUT



also supplied as
Study Top model
for junior high and
high school use.



In design, in the selecting of materials, and in the making and finishing of every part . . . Arlington gives you quality at its very best. This has been Arlington's way for over fifty years. The No. 550 Move About for example is built for the most rugged kind of classroom service . . . to be surprisingly free of maintenance problems, year after year. Functional features include:



Adjustable Desk Top . . .
rests closed at 10° angle
for reading, writing, or
drawing—may be set level
for manipulative tasks.



Positive Friction
Hinges gives
safety and quiet.
Large book box
storage area.

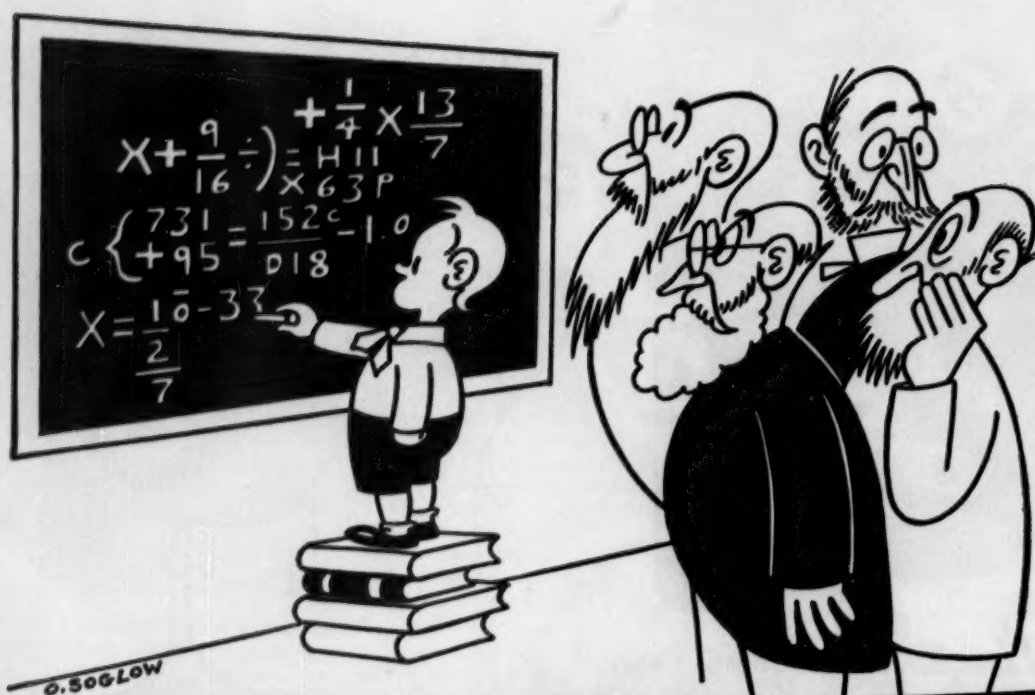


Seat Swivels
either way to
adjust to stu-
dent's natural
seating position.

WRITE FOR your free copy of the Arlington Catalog No. 55 . . . complete in-
formation on Arlington moveable desks, chair desks, table desks,
tables and chairs . . . and fixed type desks, chairs and tables of
all kinds. Also Arlington auditorium and stadium chairs.



ARLINGTON SEATING COMPANY • Arlington Heights, Illinois
for over 50 years—a dependable source of quality seating equipment



You'll be surprised at these figures!

Thanks to the thrift of employed Americans and the cooperation of 45,000 companies which have enrolled more than 8,000,000 men and women in the Payroll Savings Plan—

- Sales of E and H Bonds (H Bond is the current-income companion piece of the E Bond, sold only to individuals and purchased in larger denominations by executives) in 1954 totaled \$4.9 billion, a new peacetime record.

- Sales in 1954 exceeded *all redemptions* in that year of matured E Bonds and unmatured E and H Bonds by more than \$400 million—the highest net amount since 1949.

- Cash value of E and H Bonds outstanding reached a new record high of \$38.2 billion, a gain of \$1.5 billion in 1954.

- This \$38.2 billion cash holding by individuals represents 14% of the national debt. Never before has the national debt of our country been so widely held.

These figures, far more effectively than mere words, tell the story of The Payroll Savings Plan—why it is good for America, why it is good for business. If you do not have the Plan, or if you have the Plan and your employee percentage is less than 50%, phone, wire or write to Savings Bond Division, U. S. Treasury Department, Washington, D. C.

The United States Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and

THE NATION'S SCHOOLS

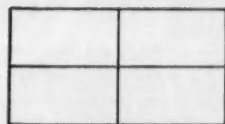




Designed to meet the challenge of change!



FIVE SIZES for every age and grade. From 21" juniors to 29" seniors. Easy stacking frees floor space for group activities.



GROUPING provides level work area for classes of any size.



NEW TWO-PUPIL DESK has all features of single desk, offers even greater saving in space.

BRUNSWICK STACKING DESKS

New idea in classroom furniture: a desk that leads a dozen lives.

On the level, here's a desk that more than earns its keep. Level top and stacking qualities give it flexibility-plus. Alone, it's an individual desk. Grouped, these desks provide larger work surfaces. Stacked in a corner, they free valuable floor space for action.

Like the matching chairs, tables, cabinets and other units in the Brunswick line of classroom furniture, this desk will be as modern twenty years from now as it is today. Today, and for the long term, you will find Brunswick furniture a sound investment.

Write for free booklet on Brunswick Stacking Desks and the name of your nearest dealer.

Brunswick

THE BRUNSWICK-BALKE-COLLENDER COMPANY
623 South Wabash Avenue • Chicago 5, Illinois

What's New ...

A Complete Line of MODERN BUSINESS TRAINING DESKS



Dual Purpose Typing Desk No. 23000. Used for typing, bookkeeping, accounting, shorthand and general business training. Saves the construction cost of at least one classroom!



Both adjustable and stationary typing desks are available. Wood construction absorbs machine vibration.



Art Desk No. 23540 is a favorite everywhere. Automatic mechanism lowers top gradually and in a quiet manner.



Economy Typing Desk No. 23500 has rugged construction features, modern styling and lifetime rigidity.

Also manufacturers of bookkeeping desks and comptometer desks.

Write for free catalog

DESKS of AMERICA, INC.
BRIDGEPORT 6, CONN.

Improved Projector for Classroom Use



The new Keystone Overhead Projector No. 1055 has been redesigned to make it more efficient in operation and in results. Brighter illumination on the screen is offered in the new classroom unit for lantern-slide projection. A double-walled lamphouse and newly designed cooling system give quiet, cool operation. Projection lamps of 500, 750 and 1000 watts can be accommodated in the new unit.

The widely varied usefulness and flexibility of the original Keystone Overhead have been retained in the new model which projects standard lantern slides, multiple Tachistoscopes, and with accessories also handles 2 inch slides, strip film, and microscopic slides. The new projector is readily portable, with or without the case. **Keystone View Co., Meadville, Pa.**

For more details circle #225 on mailing card.

Special Coating on Laminated Maple Tops

A new carbonized acid and alkali resistant coating is now used on the Tolco laminated Northern hard maple tops for use in areas where sealing is important. Select strips of 3/4 inch maple are accurately milled and electronically glue welded to form a solid edge grained top. Controlled gluing pressures and accurate regulation of the electronic process, with narrow laminations, results in an accurate glue bond for maximum strength and wear.

Multiple coats of sealers and acid resistant materials are sprayed on the top and on all exposed edges to form the new Tolco Acid Resistant Top which is designed for years of severe usage in the school laboratory. A special sealer on the bottom prevents moisture absorption and warping. The tops are available in sizes from 1 1/4 to 4 inches thick, in widths to 60 inches and lengths up to 12 feet in one section. **The Tolerton Company, 265 N. Freedom Ave., Alliance, Ohio.**

For more details circle #226 on mailing card.

Curtain Traverse Track for Smooth Operation

The new Son-Nel Curtain Conveyors are designed for use in the classroom, auditorium or other area. The traverse track of extruded aluminum is available in standard lengths of 12, 14, 16 and 18 feet, or cut to measure. Traverse tracks and hardware are dimensionally accurate and precision made of durable materials to ensure smooth operation over long periods of use. Carrier rollers and wheel pulleys of Phenolite are designed for long life.

The traverse track may be mounted on the backing strip and concealed by plaster or acoustical tile, or it may be



mounted directly to ceiling or window frame work. It can be used for window draperies, for auditorium curtains, for dividing classrooms and other areas and for other uses where curtains or draperies are required.

Son-Nel Light Control Drapes can be used on the new conveyor tracks to provide darkening for classrooms or auditoriums when required for audio-visual education or other needs. They have been especially designed for school use. **Son-Nel Products Company, 900 19th Ave., Oakland 6, Calif.**

For more details circle #227 on mailing card.

Four Large Models Added to Spencer Boiler Line

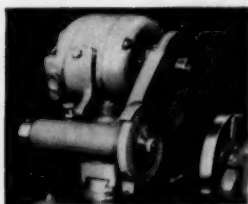
Improved design, new sizes and new features are offered in the line of Spencer "C" Boilers for institutional use. They are now available with standard 15 inch base and with extra base heights. Greater range of application is offered in the four new larger models with three inch fire tubes which have been added to the line.

The Spencer "C" Boilers are water-cooled, have precision ground flue and fire-door frames, are equipped with heavy cast iron insulated doors and have extra-heavy steel plate smoke boxes and staggered boiler tubes for rapid heat transfer. Any fuel can be fired in the boilers which are easily and quickly converted from hand to automatic firing.

The new line of Spencer Boilers is fully approved under the Steel Boiler Institute Engineering Code, according to the manufacturer. **Spencer Heaters, Lycoming Div., AVCO Mfg. Corp., Williamsport, Pa.**

For more details circle #228 on mailing card.

(Continued on page 216)



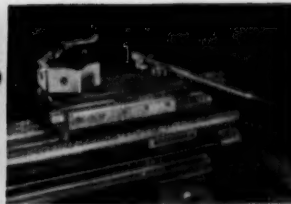
External Grinder



Milling Attachment



Handlever Tailstock



Handlever Bed Turret



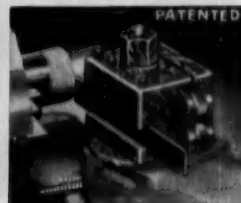
Telescopic Taper Attachment



Handwheel Collet Attachment



Handlever Collet Attachment



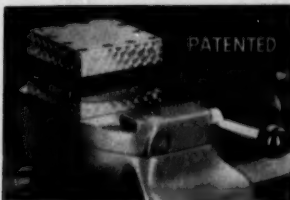
10 in 1 Tool Holder



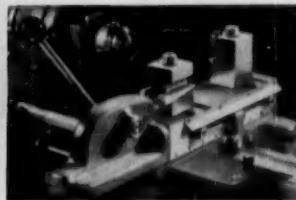
Ball Bearing Live Center



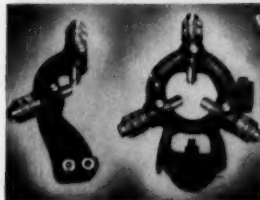
Adjustable Collet Bushing Chuck



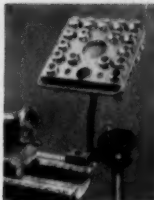
Square Turret Tool Block



Handlever Double Tool Cross Slide



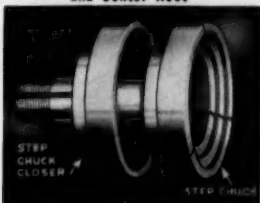
Telescoping Jaw Follower Rest and Center Rest



Collet Rack



Steel and Brass Collets



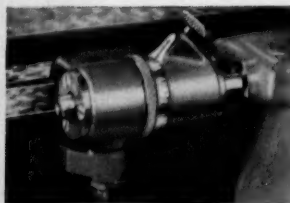
Step Chucks and Closers



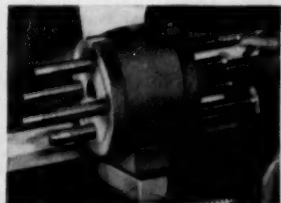
Centers and Drill Pads



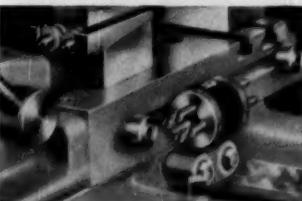
Thread Dial Indicator



Micrometer Carriage Stop



Four Position Carriage Stop



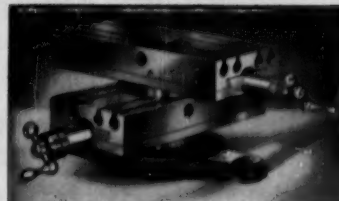
Four Position Cross Slide Stop



Safety and Standard Lathe Dogs



Coolant Pump



Universal Table

SOUTH BEND Lathe Attachments

- Increase Lathe Versatility
- Save Equipment Investment
- Give Students More Experience
- Duplicate Production Practices
- Simplify Difficult Jobs
- Increase Variety of Projects

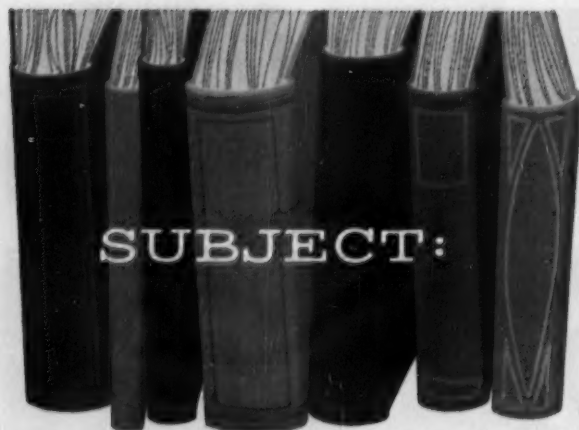
Write for Catalog 5102

SOUTH BEND LATHE

Building Better Tools Since 1906

SOUTH BEND 23,
INDIANA





SUBJECT:

Budgetary control -

how to simplify and
make more effective.

HERE'S THE BOOK YOU START WITH:

Your telephone directory will put you in contact with our representative in your community. Let him show you how the Burroughs Budgetary Accounting Machine makes possible simple form design . . . forms that are more compact, neat, and logically arranged.

He'll show you mechanized advantages, too, such as the "repeat" feature that reduces indexing work, and the positive form alignment of the Burroughs Budgetary Accounting Machine. You'll be impressed with the posting speed and simplicity of operation obtainable with this combination of right form and right machine for perfect budget control. Burroughs Budgetary Accounting Machine mechanically prevents posting errors caused by the operator's picking up previous balances incorrectly.

FREE: "STREAMLINED GOVERNMENT ACCOUNTING AND MANAGEMENT REPORTS."

Our special booklet on streamlining accounting and management reports is packed with helpful information on how the Burroughs Budgetary Accounting Machine simplifies budget ledger preparation and other accounting operations. Phone our local representative and ask for your copy, or write Burroughs Corporation, Detroit 32, Michigan.

WHEREVER THERE'S BUSINESS THERE'S

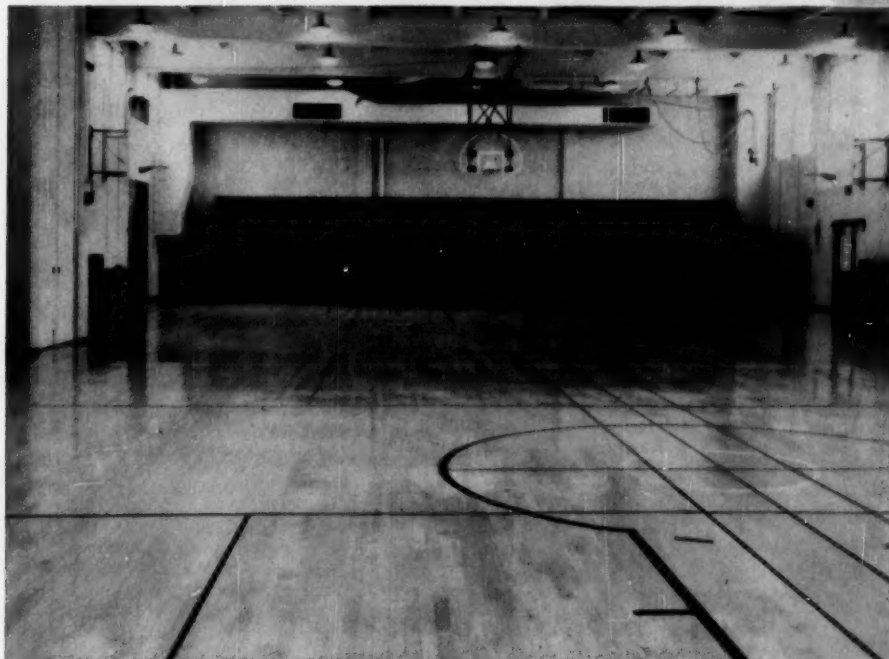
Burroughs is a trade-mark.



**"I especially recommend
Seal-O-San Gym Floor Finish"
for floors that get heavy use**

Ernest Joslyn

Ernest Joslyn
Head, Department of Maintenance



*This attractive gym
Floor is kept in tip-top
shape with Seal-O-San
Gym Floor Finish.*

**10 YEARS OF USE proves
these outstanding advantages . . .**

For 10 years, Middleburgh Central School has used Huntington maintenance products exclusively because Mr. Ernest Joslyn, head of maintenance, relies on their dependability. He states, "I have found that, for ease of application, coverage, wearability and a fine finished appearance, Huntington seals and waxes are far superior to any other brands, used under the same conditions, that I have tested."

The gym floor at Middleburgh is finished with Seal-O-San to get maximum utility from the surface. Mr. Joslyn reports, "I especially recommend Huntington Seal-O-San gymnasium finish, which I believe to be the best on the market today."

For good protection and easy maintenance, rely on Huntington products. Let one of our trained representatives advise you on floor care. There's no obligation.



**CORRIDORS AT MIDDLEBURGH ARE PROTECTED
AND BEAUTIFIED WITH HUNTINGTON WAXES.**



**MIDDLEBURGH CENTRAL SCHOOL
MIDDLEBURGH, NEW YORK**

HUNTINGTON LABORATORIES



Philadelphia 35, Pa.

Huntington, Indiana

Toronto 2, Ontario

What's New ...

Safety and Economy in Bus Body Design

Student protection and operating and maintenance economy are the results of



the design of the new Safeguard School Bus. One-piece body posts and roof ribs providing side and overhead protection, with one-piece heavy-gauge side rub rails which are not stamped from side panels but separate members riveted directly to the body frame for greater horizontal strength, are some of the safety features. The extra-heavy floor, roll-formed of 16 gauge steel, has a heavy skirt spar to seal out dust, dirt and moisture.

The extra wide entrance door with low windows permits the driver to see all children, even the smallest. Heads and arms are kept inside the bus by the Split-Sash windows.

Another feature is the new Ward emergency door which has inside-outside operation and stanchions and grab rails at the lighted step-well increase safe en-

trance and exit. Unlimited visibility on the road ahead is provided by the flush cowl, another safety feature of the bus. Ward Body Works, Inc., 4201 S. Congress, Austin, Texas.

For more details circle #229 on mailing card.

Photocopy Paper for Use in Light Areas

Photocopy equipment can be operated in areas using bright lights with the new Apeco Fog-Resisting Photocopy Paper. The paper has high light-resistant qualities and results in sharper copy, higher contrast and less exhaustion of developer. American Photocopy Equipment Co., 1920 W. Peterson Ave., Chicago 26.

For more details circle #230 on mailing card.

Television Projection for Large-Screen Viewing

The entire student body can view a television program without undue eye-strain with the Fleetwood FL-1001 Television Projector. The unit is capable of projecting a clear, bright, well defined picture up to 9 by 12 feet for use in large auditoriums, gymnasiums and other areas for regular or closed circuit television. It is a completely self-contained unit in a functional heavy-duty metal

(Continued on page 220)

cabinet which houses built-in speakers for smaller groups, plug-in facilities for driving remote speakers, a television receiver capable of receiving all channels and is equipped to receive a television signal direct from network lines. Power supplies, amplifiers and video units are mounted on sliding racks for immediate accessibility for servicing.

The completely mobile unit can be rolled to area of use and operates on 110 volt alternating current. All controls are designed for simple, easy operation.



The overall size of the unit is 24 inches wide, 36 inches deep and 48 inches high. The Fleetwood Corporation, 1037 Custer Drive, Toledo 12, Ohio.

For more details circle #231 on mailing card.

FOR LOW-COST FIELD SEATING



AMERICAN-UNIVERSAL "PORTABLE" BLEACHER

A COMPLETE "PACKAGE-UNIT"

Nothing else to buy. Ruggedly built of prefabricated, welded-steel panels—safety engineered—weather proofed for minimum maintenance. You need no expensive foundations, can easily install this American-Universal skid-mounted Bleacher with unskilled help. One complete package-unit—at lowest possible cost.



Basic 5-row unit seats 50. Unlimited combinations for up to 10 and 15-row installations.

Write for new catalog

UNIVERSAL MANUFACTURING CORP.
ZELIENOPLE 7, PENNSYLVANIA



**3-IN-1
LIFETIME
EFFICIENCY**

FLEX-MASTER

6 STUDENT DRAWING TABLE

Manufacturers of Lifetime Steel Blue Print Filing Cabinets, Drafting Tables, Tracing Tables, etc.

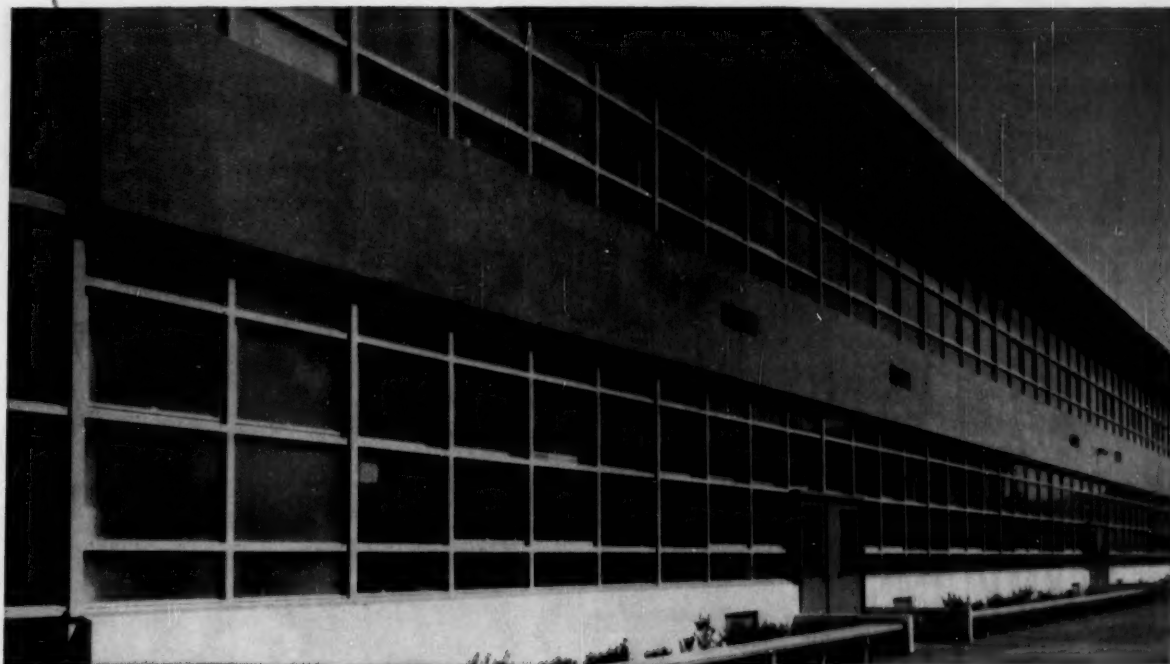
It's a LIFETIME* STEEL DRAWING TABLE . . . a BOARD STORAGE UNIT . . . a TOOL STORAGE COMPARTMENT. Equipped with selected soft wood adjustable top; large all-steel center drawer; 6 master-keyed, individually locked tool drawers. Holds 6 boards up to 20" x 26". Rigid welded steel construction stands up to abuse from the crowded classrooms it comfortably serves.

Baked hammertone gray enamel finish. 37" high. Many board sizes. Also available with steel or hardwood tops.

WRITE TODAY FOR COMPLETE CATALOG

STACOR EQUIPMENT CO.

477 Troy Avenue, Brooklyn 3, N. Y.



San Miguel School, San Francisco, Calif. Spandrel—1" x 1" Dark Blue glazed Faience mosaics, color 2104. Mario Ciampi, Architect. Charleston Tile Co., Tile Contractor.

School "Wear-Conditioning" by Mosaic Ceramic Tile

School administrators and architects know that colorful, permanent Mosaic ceramic tile walls and floors stay "new" for years . . . just can't be defaced or destroyed. Mosaic Tile is stainproof, dentproof and easy to clean. It costs no more to build with Mosaic Tile, the only complete ceramic tile line . . . and maintenance costs are lower than with any other material.

Ceramic tile by Mosaic, America's largest ceramic tile manufacturer, can do much for your buildings. Consult your architect, builder or tile contractor—or write Dept. 48-7, The Mosaic Tile Company, Zanesville, Ohio, for helpful information on ceramic tile and its application to your requirements.

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Over 5000 Tile Contractors to serve you.

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Parkland Union High School, Siegersville, Pa. Wall—Mosaic 9" x 6" x 1/2" glazed wall tile, color 167. Deck—Granitex mosaics, pattern 1799, color Spruce Range. Gutter—Granitex mosaics. Pool lining—Ceramic mosaics, pattern 1003-A with Chocolate markers. H. S. Everett & Associates, Architects. Lehigh Tile & Marble Co., Tile Contractor.



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***SYMPTOMS:**

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Your facilities are beyond criticism with these Straubel products — by sanitation standards and economy, both! Highly absorbent, strong-fibred, yet extra-soft tissues do not easily puncture . . . And, Straubel's exclusive "Convenience-Cut" roll dispenses but *two sheets at one time* — stopping waste and tissue littered floors. You'll save and satisfy with Straubel's hand towels, too, because fewer are needed for a perfect drying job. They come in 100% kraft, semi-kraft or manilla — white, natural or brown — priced to meet every school budget.

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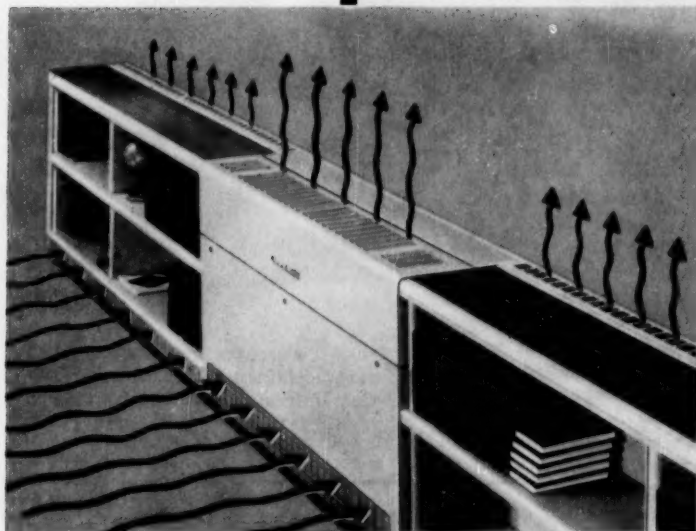
THREE LEAF Interfolded tissues are your wise choice for cabinet or recessed fixtures.

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**Nesbitt Syncretizers
with Wind-o-line
Radiation**

Eliminate "wall of ice" Problem



Nesbitt heating and ventilating units are the modern way to provide perfect comfort conditions in classrooms. The "wall of ice" problem (cold window downdrafts) need never be a threat to the health and comfort of students and teachers. For Nesbitt Syncretizers with Wind-o-line, radiate a blanket of warmth that tempers window drafts . . . and deflects them up and over classroom occupants.

A Nesbitt "package" (left) consists of a unit ventilator, with finned-tube radiation housed in beautiful open or closed cabinets. Syncretizers also available without Wind-o-line radiation or cabinets. If you are planning a new school, or are modernizing present classrooms — select Nesbitt units for the highest degree of comfort known.

Extra economies, too, with Nesbitt units

While the Nesbitt Syncretizer warms and ventilates for ideal room temperatures, Wind-o-line takes care of draft deflection. With the combination of these two important functions, overheating is eliminated. No energy-sapping stuffiness! No stagnant air pockets! No wasted fuel! For complete information and prices on Nesbitt Syncretizers with Wind-o-line — or other heating and ventilating equipment — call your American Blower representative, or write us direct.



Nesbitt Syncretizers with Wind-o-line radiation assure classroom comfort.

American Blower products serve schools

- Heating and Ventilating Units
- Quiet, low-cost Unit Heaters
- Attractive Ventilating Fans
- Efficient Utility Sets

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Serving home and industry: AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL TILE
DETROIT CONTROLS • KEWAUNEE BOILERS • ROSS EXCHANGERS • SUNBEAM AIR CONDITIONERS

What's New ...

Reproductions Available of Pre-Columbian Sculpture

Reproductions of originals from the Arensberg Collection of Pre-Columbian



sculpture at the Philadelphia Museum of Art are now being made available to schools for study or as decorative pieces. The collection is described as one of the most representative of the cultures of Mexico, Central and South America. Infinite care has gone into the making of molds and casts of eight of the pieces for reproduction. The casting material is a stone-like composition offering strength with exact reproduction of detail, from fine lines to rough surfaces. Each cast is hand-finished to match the color and patina of the originals.

The Laughing Head illustrated, pre-

sumably from the Late Pre-Columbian period, is an example of the pieces available which cover several cultures and areas in time as well as in geographical location. The very carefully executed reproductions are available at small cost and should provide excellent teaching material as well as interesting decorative sculpture. **Museum Pieces Incorporated, 114 E. 32nd St., New York 16.**

For more details circle #232 on mailing card.

Fast-Drying Wall Finish Is Easily Applied

The finish coat can be put on the wall two hours after Paintercraft P.V.A. Fast-Dri Wall Primer and Sealer has been applied. This fast drying primer-sealer offers maximum ease of application and may be brushed, rolled or sprayed on. It provides a perfect foundation for flat paints and semi-gloss and gloss enamels. One gallon covers approximately 400 square feet. **The Sherwin-Williams Co., 101 Prospect Ave., N.W., Cleveland 1, Ohio.**

For more details circle #233 on mailing card.

Low-Cost Microscope Has Simplified Operation

The No. 73 Microscope is designed for student use at a cost within the reach of the school budget, according to the manufacturer. A dual cone nose-piece,

(Continued on page 222)

a gear-train coarse-fine adjustment which prevents racking objectives into slides, and a rotating 5-aperture disc diaphragm which clicks into each numerically identified position are features of the new unit.

The new instrument has an attractive metalloid finish which is resistant to the usual laboratory reagents and the bullet-

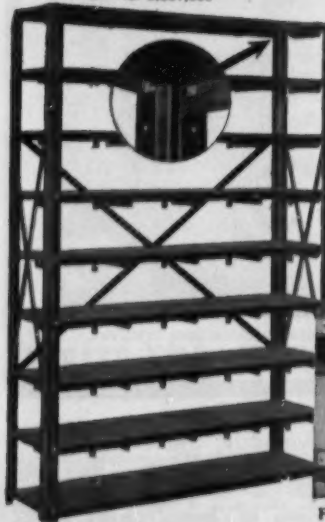


shaped objectives are color-anodized for easy identification. **American Optical Co., Instrument Div., Buffalo 15, N.Y.**

For more details circle #234 on mailing card.

NEUBAUER "TWIN-POST" Gym BASKET RACK

U.S. Pat. No. 2,621,800



Rigid Corner Posts—Safer Recessed Hasps

The Neubauer "TWIN-POST" corners are actually 2 posts with 3 strong corners (see inset circle). They keep the whole basket rack rigid and in line.

Note below how dividers guide and separate baskets and how hasp and padlock are neatly recessed inside shelf edge. Eliminates danger of cuts and bruises.



We also make Neubauer "Twin-Post" shelving in range of sizes. Write for literature.

FREE ESTIMATES—Neubauer gym Basket Racks are made in capacity desired for any size basket and can be equipped with casters. Olive green or airline grey. Special colors available.

Inquiries invited from school supply dealers.

NEUBAUER MFG. CO.

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No. 1400 Desk
36" Size

No. 1400 Chair
15" Size

SUPERIOR SCHOOL FURNITURE

Construction of selected Appalachian kiln-dried Beech. Desk units with mortise and pegged tenon; chairs with spiral-grooved dowels and rigidly glued corner blocks. In Natural, Warmtone, or School Brown. Line also includes Movable Chair Desks, Tables, Tablet Arm Chairs, and Teachers Desk.

Also available with plastic surface.

Write for name of authorized distributor in your state.

WILLIAMS & BROWER, Incorporated
SILER CITY • NORTH CAROLINA



*Protecting priceless sight, Danville, Illinois,
re-lights 24 schools with Day-Brite LUVEX® fixtures*

Realizing the value of priceless sight, school officials at Danville, Illinois, recently re-lighted 24 schools—all with Day-Brite LUVEX fluorescent fixtures.

They chose LUVEX for reasons apparent in the photograph of a typical classroom. Note the uniform, overall light pattern at desk-top levels. Note, also,

how effectively ceiling brightness contrasts are washed out—how LUVEX design takes full advantage of light-colored walls and ceilings. Observe, too, the high chalk-board visibility.

These are just a few of the reasons why more schools choose Day-Brite LUVEX Fluorescent Fixtures than any other make!



**SEE!
EXAMINE!
COMPARE!**

Not satisfied with the usual "sales-talk" or catalog descriptions, many school officials make their own side-by-side comparisons between various fixtures under consideration. They realize they are investing in light they have to "live with" for 20 years and more. Naturally, they choose Day-Brite.

CALL YOUR DAY-BRITE REPRESENTATIVE

More and more school officials with original or re-lighting problems are consulting their Day-Brite representative. Why don't you? You'll find him fully qualified by long experience to advise you on any phase of school lighting.

5445



Day-Brite Lighting, Inc.,
5451 Bulwer Avenue,
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In Canada: Amalgamated
Electric Corp. Ltd.,
Toronto 6, Ontario.

NATION'S LARGEST MANUFACTURER OF COMMERCIAL AND INDUSTRIAL LIGHTING EQUIPMENT

What's New ...

Product Literature

• The research, testing and engineering behind the new No. 445 high school desk developed by American Seating Company, Grand Rapids 2, Mich., is discussed in a booklet made available by the manufacturer. Entitled "A School Desk Is Born," the booklet presents informative data for administrator, purchasing agent or other school official on the single unit, steel-pylon-design desk with height range offering roomy, comfortable seating for grades seven through twelve.

For more details circle #235 on mailing card.

• The current discussions in consumer, professional and trade press of automation, the word used to refer to any automatic operation of machinery for manufacture or maintenance, has brought with it some misunderstanding and fear as to its effect upon our economy. The National Association of Manufacturers, 2 E. 48th St., New York 17, has prepared a 24 page, two color booklet, "Calling All Jobs, an Introduction to the Automatic Machine Age," which discusses the subject practically and with promise of a bright future. School officials and others in education who want to keep abreast of the thinking on this important subject should find the booklet informative.

For more details circle #236 on mailing card.

• Steam cooking for large and small kitchens using Steam-Chef or Steamcraft steamers is discussed in a four page folder brought out by The Cleveland Range Co., 3333 Lakeside Ave., Cleveland 14, Ohio. Entitled "Steaming Is Better," the folder gives the advantages, facts and specifications of steam cooking.

For more details circle #237 on mailing card.

• "A New Method for the Teaching of Arithmetic" under the direction of Andrew F. Schott, Ph.D., Marquette University, is the title of a booklet published by Burroughs Corporation, Detroit 32, Mich. It describes the interesting new system employing a newly designed abacus and a Burroughs "Instructor" machine with a manual outlining the teaching method. The booklet gives a summary of results based on a study of the project and indicates greatly increased pupil gains when the new system is employed.

For more details circle #238 on mailing card.

• Alundum aggregate for terrazzo and cement floors is discussed in Catalog 1935 released by the Norton Co., Worcester, Mass. The non-slip protection and wear resistance of Alundum floor products is stressed and the various products are illustrated and described in detail. Typical installations are also pictured in the eight page catalog.

For more details circle #239 on mailing card.

• What seems to be a relatively unimportant detail but results in study-time loss is the problem of inadequate supply and incorrect placement of the classroom pencil sharpener, according to A. D. Farrell of Apso Products, Inc., P.O. Box 840, Beverly Hills, Calif. His report, "The Correct Pencil Sharpener for Your School," discusses pencil sharpener construction, maintenance and specific design and the disturbance factor and lost study time involved when pencil sharpeners are not properly placed in the classroom or an inadequate supply is available.

For more details circle #240 on mailing card.

• "Nailock," "Screwlock" and "Perf-A-Best" systems for suspended ceilings are illustrated and described in Catalog NSP-7 brought out by The Sanymetal Products Co., Inc., 1701 Urbana Rd., Cleveland 12, Ohio. Details on Utility Nailing Channel for light suspended ceilings are also included in the eight page catalog.

For more details circle #241 on mailing card.

• Nearly 200 athletic items in its line are included in a 32 page booklet brought out by W. J. Voit Rubber Corp., 2945 E. 12th St., Los Angeles 23, Calif. Many new items which appear in the line for the first time are to be found in the compact, colorful booklet.

For more details circle #242 on mailing card.

(Continued on page 224)

Krueger Presents

**THE FIRST NEW CONCEPT
IN FOLDING CHAIR STRUCTURE**



**DURABLY BUILT TO
WITHSTAND THE MOST
GRUELLING CONDITIONS**

Krueger's ahead again . . . this time with two entirely new Y-type chairs — one of tubular steel, the other of channel steel. Both, boasting radically new structural methods and details that make them the finest, most durable and comfortable portable chairs ever offered.

CHAIRS TO MEET EVERY BUDGET

In addition to the tubular series 80 chair (illustrated) and the new Channel series 70, Krueger offers a wide range of chairs from which to choose. All, featuring exclusive structural details that assure complete satisfaction for many years after your investment has paid for itself.

**WRITE FOR NEW COMPLETE
LINE CATALOG**

**LOOK AT THESE ENGINEERED
FEATURES OF THE SERIES 80**

- 18-gauge electrically seam-welded tubular frames
- Pivot point frame strengtheners
- 16-gauge tubular frame stretchers
- Large reinforced shaped seat — 14½" x 13"
- Fully covered safety folding hinges
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**SAVE ON QUALITY
RECORDING TAPES**



Knight Plastic Tape

Noted for clean reproduction, wide response, low distortion and uniform output, ¼" plastic base; bonded red oxide coating; Type "A" (inside coated); transparent plastic reels. The best for less.

96 R 698, 5", 600-ft. reel. Only \$1.37
96 R 699, 7", 1200-ft. reel. Only \$2.10

ALLIED stocks leading makes of tape recorders and complete lines of recording tape, components and accessories. See our Catalog for complete money-saving selections.

only \$97.45



**LOW COST
Knight PUSH-BUTTON
Automatic Tape Recorder**

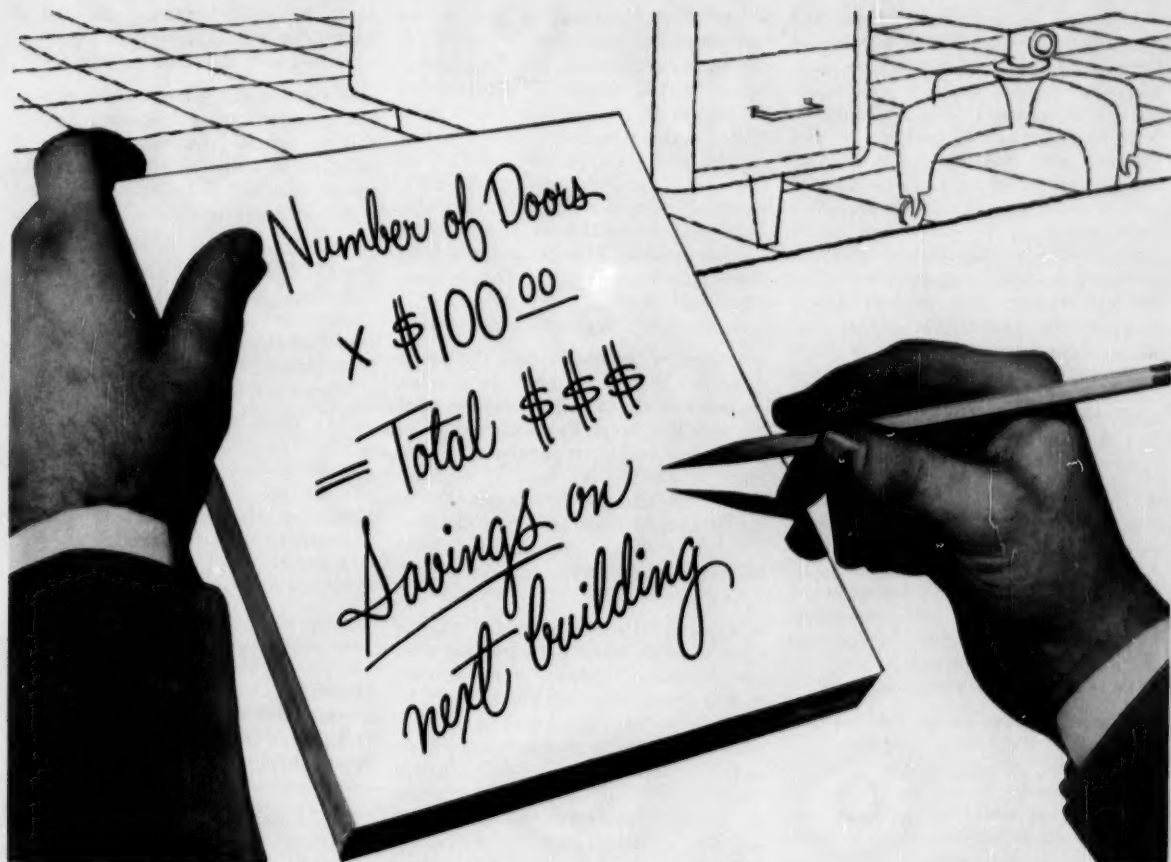
Judged "Best Buy" among recording experts and educators. Features unique Push-Button Keyboard for instant recording with remarkably faithful reproduction. Has 2-speed dual-track recording mechanism and efficient erase system. Records up to 2 hours on a single tape. For instant playback, just push a button; also has push-button control of forward, reverse and stop functions. Records with excellent fidelity from microphone, radio or phonograph. Plays back through built-in amplifier and high-quality speaker. Simple to operate. Compact, attractive. Complete with microphone, 600-ft. reel of tape and take-up reel. Shpg. wt., 29 lbs.

96 RX 675, KNIGHT Recorder. Only. . . \$97.45

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Send for the leading buying guide to everything in electronics for the school: Sound and Recording Apparatus, Training Kits, Lab Instruments, Tools, Books, Electronic Parts, etc. Write for FREE copy today.

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or fitting, etc. Doors and Frames come with a baked-on prime coat of paint. (3) They cost less to maintain because they can't warp, swell or splinter.

For complete information on Fenestra Entrance Doors, Flush or Regular Interior Doors with glass or metal panels, and Doors with the Underwriters' B Label, write: Detroit Steel Products Co., Dept. NS-4, 3405 Griffin Street, Detroit 11, Michigan.

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April, 1955

Please ask the manufacturers, indicated by the numbers I have circled, to send further literature and information provided there is no charge or obligation.

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What's New...

• Out early to facilitate reference and planning, the new 1955-56 Catalog of Coronet Films in full color and in black and white is now available from Coronet Films, Coronet Bldg., Chicago 1. A brief description of each of the 603 teaching films, together with information on the length of each subject, the subject areas and grade levels, with identification of the educational collaborator, make up the material which is presented in logical sequence from films for kindergarten and primary grades through the intermediate grades and high school. Special mention is made of desirable films for use in teacher education, other college courses and for adult education. The 96 page catalog is fully indexed.

For more details circle #243 on mailing card.

• The story of Fennell Scrubbing, Waxing, Polishing and Mopping Equipment is told in a four page folder released by Fennell System, Inc., 200 East St., Elkhart, Ind. Descriptive information and illustrations also cover waxes, sealers and cleansers manufactured by the company for institutional maintenance.

For more details circle #244 on mailing card.

• A Locker Room Design File has been prepared by the Moore Company, 1036 Quarrier St., Charleston, W. Va. The 40 page study covers the design of change rooms with overhead locker baskets and sets forth standards to be maintained in the toilet, shower and locker rooms for maximum sanitation, efficiency and economy.

For more details circle #245 on mailing card.

• A how-to-do-it book on "Projects in Metal for the Home and School Shop" has been published by the James F. Lincoln Arc Welding Foundation, Cleveland 17, Ohio. Projects are discussed in the book with line drawings of plans, and photographs of the finished product. The booklet, which carries a price of fifty cents, covers farmstead equipment and improvements, household equipment, tools and service equipment and recreational equipment.

For more details circle #246 on mailing card.

• "Classroom Seating by Norquist" is discussed in a folder issued by Norquist Products Inc., Jamestown, N.Y. Construction features of Norquist desks and seats are detailed, specifications are given and illustrations show the furniture separately and installed in classrooms.

For more details circle #247 on mailing card.

• The historical backgrounds of corn, the contribution of the corn belt, the use of hybrid seed, the corn kernel and its constituent parts and the products into which corn is made are discussed in "Our Gift from the Indians," a booklet for seventh to ninth grade study brought out by Corn Industries Research Foundation, 3 E. 45th St., New York 17.

For more details circle #248 on mailing card.

• Factual information, written in an easy question and answer format, is offered administrators and purchasing agents on the subject of the selection of the proper ribbons for typewriters, adding, calculating and tabulating machines, and teletype and addressing machines. The six page "pocket encyclopedia" discusses the differences in silk, nylon and cotton ribbons in a practical manner in folder RSR-291 available from Remington Rand Inc., 315 Fourth Ave., New York 10.

For more details circle #249 on mailing card.

• Educators can select exactly the equipment they require for use in the smallest classroom or the largest auditorium from the new Kodascope Pageant series of 16 mm. sound and silent projectors. A new folder on the line is offered by the Eastman Kodak Company, Rochester 4, N.Y., giving general information on the line, detailed description of special features and data on the pre-lubrication feature.

For more details circle #250 on mailing card.

• Typical installations of the various types of Mills Metal Partitions for toilet compartments, shower and dressing rooms, shower units and hospital cubicles are described and illustrated in two-tone color combinations in a new catalog released by The Mills Co., 997 Wayside Rd., Cleveland 10, Ohio. Illustrations of all standard hardware and fittings are included. A special feature of the catalog is a color chart of the 20 Mills standard colors to aid in color planning.

For more details circle #251 on mailing card.

• Information on the working characteristics of Pyrex and Vycor brand glasses is found in the newly revised edition of "Laboratory Glass Blowing With Pyrex Brand Glasses." Brought out by Corning Glass Works, Corning, N. Y., the 20 page pamphlet also includes fundamental glass blowing operations and recommendations for suitable tools and equipment.

For more details circle #252 on mailing card.

• A promotional package consisting of nine two-color descriptive bulletins outlining the application and features of G-E panelboards has been announced by the Distribution Assemblies Dept., General Electric Co., Plainville, Conn. All bulletins contain data important to the proper selection and application of this equipment.

For more details circle #253 on mailing card.

Film Releases

"Swedish Family Story" and "Fundamental Skills in a Unit of Work," educational films in color or black and white. Bailey Films, Inc., 6509 De Longpre Ave., Hollywood 28, Calif.

For more details circle #254 on mailing card.

"Great Britain—Its Geographical Position" and "Pathway Into Light," a tribute to Louis Braille, both 16 mm. sound

films. British Information Services, 30 Rockefeller Plaza, New York 20.

For more details circle #255 on mailing card.

"Bill's Better Breakfast Puppet Show," health and nutrition education film for children of the elementary grades, 16 mm., color, sound, 25 min. Cereal Institute, Inc., 135 S. La Salle, Chicago 3.

For more details circle #256 on mailing card.

"Our National Park System:" "Yellowstone," "Yosemite," "Grand Canyon," "Zion and Bryce" and "Mesa Verde," filmstrip series in color, captioned. Haeseler Pictures, Amity Road, Woodbridge, New Haven 15, Conn.

For more details circle #257 on mailing card.

"Make Sense With Your Clothing Dollars," 35 mm., color, silent filmstrip accompanied by a script to be read as the pictures are being shown. Consumer Education Dept., Household Finance Corporation, 919 N. Michigan Ave., Chicago 11.

For more details circle #258 on mailing card.

"Stories of Music Classics," a series of 6 color filmstrips: "The Sleeping Beauty," "William Tell," "A Midsummer Night's Dream," "The Swan Lake," "The Bartered Bride" and "Scheherazade." The Jam Handy Organization, 2821 E. Grand Blvd., Detroit 11, Mich.

For more details circle #259 on mailing card.

"The Middle East: Crossroads of Three Continents," 35 mm., 57 frames, black and white filmstrip on current affairs, accompanied by a discussion manual. Office of Educational Activities, The New York Times, Times Square, New York 36.

For more details circle #260 on mailing card.

"Our National Government — How It Functions," a series of 4 filmstrips: "The Presidency," "Political Parties," "The Congress of the United States" and "The Federal Judiciary," all in color, with captions. "The World Believes," a series of 4 color filmstrips, "Judaism Today," "Protestant Christianity Today," "The Roman Catholic Church Today" and "Islam Today." Society For Visual Education, Inc., 1345 W. Diversey Pkwy., Chicago 14.

For more details circle #261 on mailing card.

"Industrial Arts: A Safe Shop" and "Discussion Problems: What About Juvenile Delinquency," both 1 reel, 16 mm., sound films. "American Authors Series," series of six color filmstrips dealing with the life and work of American authors. "Map Series," series of two filmstrips: "Economic Geography Maps" and "Outline Maps." "Principles of Biology, Set No. 1," series of six filmstrips for high school and college biology classes. "Young America Sings: Grade Three," series of eight synchronized filmstrips. Young America Films, Inc., 18 E. 41st St., New York 17.

For more details circle #262 on mailing card.



More of this...



...in here...can make a happy difference

Nobody likes to be shut in. Least of all a youngster.

That's why children are happier . . . and seem to learn more, faster . . . in a "Daylight Wall" classroom. Clear glass from sill to ceiling brings in the grass and the trees, the sun and the sky. It helps create an atmosphere of alertness that makes a happy difference in the children's attitude.

Cuts costs, too. Artificial lighting isn't needed so much. Less wall area to paint and maintain. Lower construction costs. In cold climates your daylight walls should be *Thermopane** insulating glass for maximum comfort and heating economy. Please write for your free copy of "How to Get Nature-Quality Light for School Children". Dept. 4345, Libbey-Owens-Ford Glass Company, 608 Madison Ave., Toledo 3, Ohio.



THERMOPANE • PLATE GLASS • WINDOW GLASS
DAYLIGHT WALLS

... THAT LET YOU SEE

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Those who really know say:

CERTIFIED



BALLASTS

give best results!

● No one knows better the value of **CERTIFIED CBM BALLASTS** than the manufacturers of fluorescent tubes. For the satisfactory performance of their lamps is vitally dependent on the ballasts that operate them. They know **CERTIFIED CBM BALLASTS** are Tailored to the Tube.

CHAMPION says:

"Fluorescent lamps are designed to operate at specific electrical values. The use of auxiliary equipment that has been proven to meet these agreed upon standards will assure the user maximum value for his lighting dollar with a minimum of operational failures. Certified Ballasts are inexpensive insurance."

GENERAL ELECTRIC says:

"The life and light output ratings of fluorescent lamps are based on their use with ballasts providing proper operating characteristics. Ballasts that do not provide proper electrical values may substantially reduce either lamp life or light output, or both. Ballasts certified as built to the specifications adopted by the Certified Ballast Manufacturers (CBM) do provide values that meet or exceed minimum requirements. This certification assures the lamp user, without individual testing, that lamps will operate at values close to their ratings."

SYLVANIA says:

"The light and life ratings of fluorescent lamps are based on three hour burning cycles under specified conditions and with ballasts meeting American Standards Association specifications. Ballasts marked with the CBM emblem and certified by Electrical Testing Laboratories, Inc., meet ASA specifications."

WESTINGHOUSE says:

"Use ballasts that are tested and Certified by Electrical Testing Laboratories or ones that are otherwise known to meet the specifications of the lamp manufacturer. These will give best results with Westinghouse fluorescent lamps."

That's why CERTIFIED CBM BALLASTS merit the slogan—Tailored to the Tube.

Certified CBM Ballasts are built to assure quiet operation and long trouble-free life.



CERTIFIED BALLAST MANUFACTURERS

Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO